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THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: HAMMER, Mordechai

Serial No.

: 08/894,211

Filed

: July 30, 1997

For

EXTENSIBLE AND RETRACTABLE

ELEMENTS AND VARIOUS USES FOR THE

ELEMENTS

Group Art Unit 3626 Examiner: A. Knight

Raanana, Israel RECEIVED February 13, 2002

FEB 2 1 2002

Hon. Commissioner of Patents and Trademarks Washington, D.C. 20231

GROUP 3600

Sir:

COMBINED FEE FOR FILING OF APPEAL BRIEF AND PETITION FOR EXTENSION FOR FILING APPEAL BRIEF UNDER 37 CFR 1.192(a)

In accordance with 37 CFR 1.136(a), Applicant hereby petitions to extend the time for filing the Appeal Brief, after having filed the Notice of Appeal on July 18, 2001, setting a two-month period until September 18, 2001 for said filing, for which purpose there is enclosed herewith a credit card payment form in the amount of \$1140.00 (\$160 + \$980) to cover the Appeal Brief filing fee and the required five-month extension fee, up to and including Monday February 18, 2002.

In the event of an insufficiency or omission in the fee, please contact me immediately so that I may arrange for payment.

Respectfully submitted,

02/19/2002 CCHAU1 00000108 08894211

01 FC:220

160.00 OP

Edward Langer, Att. for Applicant

Registration No. 30,564

02/19/2002 CCHAU1 00000108 08894211

02 FC:228

980.00 OP

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: HAMMER, Mordechai

Serial No E 'Co : 08/894,211

Filed : July 30, 1997

FOR : EXTENSIBLE AND RETRACTABLE ELEMENTS

AND VARIOUS USES FOR THE ELEMENTS

Group Art Unit 3626 Examiner: A. Knight

Raanana, Israel February 13, PECEIVED

Hon. Commissioner of Patents and Trademarks Washington, D.C. 20231

FEB 2 1 2002 GROUP 3600

Sir:

FILING OF APPEAL BRIEF TO THE BOARD OF PATENT APPEALS AND INTERFERENCES

Applicant hereby submits to the Board of Patent Appeals and Interferences, the attached Appeal Brief and Appendices (abbreviated "Apx.") in support of its appeal from the decision of the Examiner dated January 19, 2001 (Apx. 7), finally rejecting claims 1-49, and in support of its appeal from the position taken by the Examiner in the subsequent Advisory Action of August 1, 2001 (Apx. 9), the Interview Summary of August 22, 2001 (Apx. 10), and the Advisory Action of October 22, 2001 (Apx. 12).

The contents of this brief have been arranged in accordance with 37 CFR 1.192 (C), as summarized in the Table of Contents.

The Appeals Board is hereby requested to review the entire record and the proposed amendments after Final Rejection, particularly those filed in the Response to Final Rejection on July 18, 2001 (Apx. 8) and those proposed in the letter of October 14, 2001 (Apx. 11) after the Advisory Action and Interview Summary.

The Board is also requested to rule on the possibility of a Patent Term Extension due to delays in prosecution which are

attributed to the issues raised herein, lack of efficient examination and unreasonability of the Examiner's position, etc.

The Appeals Board is hereby requested to rule in favor of the Applicant on the issues listed in the attached material, and to order entry of the amendment filed July 18, 2001 (Apx. 8) and allowance of the application with the preamble to claim 1 as proposed in the October 14, 2001 letter (Apx. 11).

Alternatively, the Appeals Board is hereby requested to rule in favor of the Applicant on the issues listed in the attached material, and to order entry of the amendment filed July 18, 2001 and withdrawal of the finality of the Office Action of January 19, 2001, and continuation of the prosecution with a new and unbiased Examiner.

Attached is a fee of \$1140.00 to cover the filing of the Appeal Brief and the necessary period of extension for this filing.

In the event of an insufficiency or omission in the fee, please contact me immediately so that I may arrange for payment.

Respectafully submitted,

Edward Langer, Atty. for Applicant

Registration No. 30,564



APPEAL BRIEF

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1. REAL PARTY IN INTEREST

The Applicant, as named in the above caption, is the real party in interest.

2. RELATED APPEALS AND INTERFERENCES

There are no pending appeals or interferences by the Applicant regarding pending applications.

However, Applicant wishes to bring to the attention of the Board the existence of a pending reissue application by the Applicant, of US Patent 5,324,086, reissue S/N 08/936,486, which currently stands rejected, and is being examined by Group Art Unit 3652 under Examiner Cherry, for which a response to the last rejection was filed on September 6, 2001, which response has not yet been acted upon by the PTO.

3. STATUS OF CLAIMS

A list of the status of claims 1-49 follows, and in order to simplify the status, reference is made to the Final Office Action of 1/19/01 (FOA - Apx. 1), the Advisory Action of 8/1/01 (AA 1 - Apx. 9), the Interview Summary of 8/22/01 (IS - Apx. 10), and the Advisory Action of 10/22/01 (AA 2 - Apx. 12):

- 1. Rejected (FOA); indicated allowable with revised preamble (IS)
- 2. Rejected (FOA); indicated conditionally allowable (IS)
- Rejected (FOA); indicated conditionally allowable (IS)
- 4. Rejected (FOA); deleted in non-entered amendment of 7/18/01
- 5. Rejected (FOA); indicated conditionally allowable (IS)
- 6. Objected to; indicated conditionally allowable (FOA)
- 7. Objected to; indicated conditionally allowable (FOA)

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8.
       Rejected (FOA); indicated conditionally allowable (IS)
       Rejected (FOA); indicated conditionally allowable (IS)
 9.
       Rejected (FOA); indicated conditionally allowable (IS)
 10.
       Rejected (FOA); indicated conditionally allowable (IS)
 11.
       Rejected (FOA); indicated conditionally allowable (IS)
12.
13.
       Objected to; indicated conditionally allowable (FOA)
14.
       Objected to; indicated conditionally allowable (FOA)
       Objected to; indicated conditionally allowable (FOA)
15.
       Rejected (FOA); indicated conditionally allowable (IS)
16.
       Rejected (FOA); indicated conditionally allowable (IS)
17.
18.
       Rejected (FOA); indicated conditionally allowable (IS)
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       Objected to; indicated conditionally allowable (FOA)
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       Objected to; indicated conditionally allowable (FOA)
       Objected to; indicated conditionally allowable (FOA)
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       Objected to; indicated conditionally allowable
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       Rejected (FOA); indicated conditionally allowable (IS)
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       Objected to; indicated conditionally allowable (FOA)
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       Rejected (FOA); indicated conditionally allowable (IS)
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       Rejected (FOA); indicated conditionally allowable (IS)
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       Objected to; indicated conditionally allowable (FOA)
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      Rejected (FOA); indicated conditionally allowable (IS)
45.
46.
      Objected to; indicated conditionally allowable (FOA)
47.
      Rejected (FOA); indicated conditionally allowable (IS)
48.
      Objected to; indicated conditionally allowable (FOA)
49.
      Objected to; indicated conditionally allowable (FOA)
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4. STATUS OF AMENDMENTS

As indicated in the previous section, subsequent to the Final Rejection of 1/19/01 (Apx. 7), an amendment was filed in response on 7/18/01 (Apx. 8), which was denied entry as indicated in the Advisory Action of 8/1/01 (Apx. 9), for reasons stated as:

- 1) "raising new issues" and
- 2) "not placing the application in better form for appeal"

The July 18, 2001 response proposed an amendment to claim 1 (unentered) which incorporated the recitation of claim 4, which was deleted. Thus, claims 1-3 and 5-49 remained in the case.

The specification was to be amended to overcome the Examiner's objection under 37 CFR 1.71 and 35 USC 112, by the addition of the term "hand-movable" at page 8, line 14.

By way of a quick review, the amendments to claim 1 prior to July 18, 2001 had already incorporated the following features:

- 1) simultaneous driving and driven motion of linking means and first and second elements;
- 2) driving motion of the linking means is controllably reversible;
- 3) driven motion of said first and second elements is non-gravity dependent;
- 4) both extension and retraction motion of the elements are under full, reversible and multipliable control of the mechanism;
- 5) motion of the elements is in-line with their orientation, achieving linear-to-linear driven motion; and
- 6) the elements are connectable to a tool or other object.

The unentered amendment to claim 1 incorporated another feature previously recited in claim 4. This feature defines the relationship between the directions of driving and driven motion,

such that when driving motion is applied between an end of a selected <u>reference</u> one of the first and second elements, and the linking means (loop), there results one of two types of extension and retraction motion, with driven motion developed either in the same, or reverse direction.

It is suggested that the Appeals Board carefully review the entire record, especially the unentered amendment filed July 18, 2001, and the arguments presented therein urging patentability.

Subsequent to the Advisory Action of 8/1/01, a personal interview was conducted on 8/22/01 with Examiner Knight on behalf of the Applicant, by the undersigned, Applicant's attorney, and in this interview, a video presentation of the invention was shown, and a tentative agreement was reached with the undersigned, as recorded in the Interview Summary (Apx. 10), indicating allowance of all the claims if claim 1 was revised to include the "specific recitations for the use of the device as recited in the allowed (objected to) claims. Such claims will be considered combination claims".

Subsequent to telephone conversations with the Examiner, a letter to the Examiner was submitted on 10/14/01 (Apx. 11) with an attachment of a proposed amended claim 1 with a revised preamble, as understood would be acceptable in accordance with the Interview Summary, and in response, a second Advisory Action was issued on 10/22/01 (Apx. 12), indicating that this proposed amendment did not place the application in condition for allowance, but that no new issues were raised.

5. SUMMARY OF THE INVENTION

As stated in the Remarks filed with the response to the Final Office Action, and prior thereto, the object of the present invention is to the problems of existing products overcome exhibiting telescopic movement. At p. 2, line 23, through p. 3, line 8, the invention is summarized as a system of telescopic elements for multiplying the effective physical work achieved by the telescopic motion of various structures, applications including cleaning systems, vacuum cleaners, measuring rods, tools, paint rollers, wall scrapers, music stands and instruments, parasols, shades, curtains, sailing boat masts, and structures such as chairs, tripods, tables, tents, etc. The invention also application has to the field of cargo transportation.

As described in the specification, and as modified by the Amendment of 7/18/01 (Apx. 8 - per the underlined text which was intended to be added), the invention is described with reference to Fig. 1, at p. 8, lines 11-24:

"Referring to Fig. 1, there is shown a preferred embodiment of a tool 100 which can be operated from either side. In Fig. 1 there is seen a pipe 102 with two hand-movable segments 104, 106 (or more) on which there can be assembled different tools at either end as needed. In the figure, a roller 101 for painting is assembled on the top end 110. The roller and pipe are operated by holding the fixed handle 114 in one hand, and operating the activation handle 116 (that moves on and along segment 104) with the other hand, in reference to the fixed handle 114. This moves segment 106 up and down through motion of straps 118 which are attached at either end to handle 116 at points 119 with the loop sliding through holes 120 formed in segment 104, and being attached to end 122 of segment 106, such that roller 101 turns and moves up and down, to perform the paint job."

The reason for the attempted addition of the underlined text, and the support for this amendment in the original specification, was presented in the Remarks accompanying the 7/18/01 Amendment, at p. 4-6, a portion of which is reproduced here:

"... it is believed that "hand-movable" is more precise and clearly understood, since it means that the elements \underline{may} be moved by hand."

"The illustration of this activity is clear from Figs. 5 and 6 where a man is shown operating the segments of telescopic tool 100, and this shows that the device is hand-movable, one hand moving in reference to the other."

"Furthermore, the recitation of "hand-motion" in claim 4 clearly means "hand-movable", and this has now been incorporated in claim 1, and claim 4 deleted."

"Therefore, there can be no question as to whether the telescopic tool is hand-movable, and this new terminology should be acceptable and should not be considered new matter, since it is clearly based on the initial specification, claims and drawings."

The appealed claim 1, as presented in the letter of 10/14/01 (Apx. 11) can be read on this Fig. 1 embodiment and many others, per the following presentation of the claim (Apx. 1 presents this claim annotated in brackets [] with drawing references and element reference numbers):

 (Four times amended) A motion transmission and multiplication system for use with systems, devices or structures that require movement of segments, to enable extendable and retractable motion, such as cleaning systems, measuring systems,

hand-movable tools, music instruments and accessories, electrical and telecommunication devices, transportation and delivery systems, shades, sailing boats, chairs, tripods, tables and tents, said motion transmission and multiplication system comprising:

at least first and second hand-movable elements each having anterior and posterior ends, said elements extending in the same orientation, each element having at least one point thereon connectable to a tool or other object; and

at least a first means linking said first and second elements and being movable with respect to at least one of them, said first linking means also being connectable to an additional element,

said first linking means being arranged on said elements such that when said first linking means is moved with a controllably reversible driving motion with respect to either of said anterior and posterior ends of a selected reference one of either of said first and second elements, wherein said driving motion is in a direction in-line with said orientation,

then said first and second elements, and if connected, said additional element are simultaneously provided with a controllably reversible and multipliable, non-gravity dependent, linear-to-linear driven motion with respect to each other in-line with said orientation,

said driven motion being in the same direction as said driving motion, or reverse thereto, in accordance with which reference one of said first and second elements was selected in respect of said driving motion.

6. ISSUES

The issues are subtitled and listed in the order of their importance from the Applicant's perspective, regarding the development of the issues, from the Office Actions, the Final Rejection, the Response to Final, the Advisory Action, Interview Summary, second Advisory Action and the Applicant's submittals.

1) REJECTION OF ENTRY OF 7/18/01 AMENDMENT

Whether the Advisory Action of August 1, 2001 was proper in rejecting entry of the amendment contained in the Response to Final Rejection filed July 18, 2001 ?

2) GROUNDS FOR REJECTION OF ENTRY OF 7/18/01 AMENDMENT

Whether the Advisory Action of August 1, 2001 was proper in rejecting the above-mentioned amendment as raising "new issues" ?

3) GROUNDS FOR REJECTION OF ENTRY OF 7/18/01 AMENDMENT

Whether the Advisory Action of August 1, 2001 was proper in rejecting the above-mentioned amendment as not "deemed to place the application in better form for appeal by materially simplifying or reducing the issues for appeal"?

Whether the Examiner clearly stated in the Interview Summary of August 22, 2001, that agreement was reached with Applicant's representative, on the need to modify claim 1 by providing a "closed list" in the proposed amendment to the preamble ? (see next item 5)

Whether the Examiner acted properly by indicating to the Applicant's representative, in a phone conversation conducted on October 10, 2001, after issuing the Interview Summary of August 22, 2001, that he would not accept anything but a "closed" preamble, that is, a preamble amendment to claim 1 containing a "closed list" limiting the preamble only to those embodiments he specified as corresponding to objected-to claims?

6) EXAMINER REFUSAL OF REQUEST FOR ANOTHER INTERVIEW

Whether the Examiner acted properly in refusing to grant the request of Applicant's representative, presented in his October 14, 2001 letter, for another interview, to resolve the wording of the preamble, during the period October 15-18, when Applicant's representative would be at the US PTO, knowing that this was an opportunity to meet Applicant's representative, who was traveling into the US from Israel, where he resides and maintains his office?

7) 37 CFR 1.71 OBJECTIONS TO THE SPECIFICATION

Whether the objection to the specification is proper, under 37 CFR 1.71 regarding the term "hand-holdable" (now amended to be "hand-movable" by the unentered Amendment of 7/18/01), for, as stated by the Examiner, lack of "any basis for the interpretation of this phrase in the specification"?

8) SEC. 112 FIRST PARAGRAPH REJECTION

Whether the rejection of claims 1-49 is proper, under Sec. 112, first paragraph, regarding the term "hand-holdable" (now "hand-movable" by the unentered Amendment of July 18, 2001), for, as stated by the Examiner, containing subject matter not described in the specification in such a way as to convey to a skilled person that the inventor had possession of the claimed invention at the time of filing the application?

9) SEC. 112 SECOND PARAGRAPH REJECTION

Whether the rejection of claims 1-49 is proper, under Sec. 112, second paragraph, regarding the term "hand-holdable" (now "hand-movable" by the Amendment of July 18, 2001), for, as stated by the Examiner, being unclear as to interpretation, given applicant's disclosure of a "myriad" of objects, and if this means any object that can be held with outstretched hands, or those that fit within the palm of a single hand?

10) SEC. 103(a) REJECTION- PIPES AND WILDING

Whether the rejection of claims 1-3, 5, 8, 16-18, 36, 38, 41, 42, 45 and 47 was proper, as being unpatentable under 35 USC Sec. 103(a), over Pipes, in view of Wilding?

11) SEC. 103(a) REJECTION- WHITE AND WILDING

Whether the rejection of claims 1-3, 5, 8-12, 16-19, 23 and 40 was proper, as being unpatentable under 35 USC Sec. 103(a), over White, in view of Wilding?

12) SEC. 103(a) REJECTION- WHITE AND WILDING, SANDBURG

Whether the rejection of claim 4 was proper, as being unpatentable under 35 USC Sec. 103(a), over White, in view of Wilding, and further in view of Sandburg?

13) EXAMINER'S ANALYSIS AND CHARACTERIZATION OF REFERENCES

Whether the Examiner has properly analyzed and characterized the references, either individually or in combination, such as can be seen from the Examiner's application of the Pipes reference which, while the Examiner concedes (at p. 6, line 14 and p. 7, line 5 of the January 19, 2001 Office Action) does not disclose a controllably reversible device, is nevertheless "combined" with the Wilding reference for its teaching of a controller, even

though Wilding is an electronic controller, not readily applicable to a simple system as disclosed by the invention ?

14) REASONABILITY OF EXAMINER'S POSITION ON REFERENCES

Whether the Examiner has taken an arbitrary approach to the teachings of the prior art, and has taken an unreasonable position, to make the references "fit" the rejection of the claims, for example, in the combined references of Pipes and Wilding, as per (13) ?

15) FAIRNESS, CONSISTENCY AND THOROUGHNESS OF EXAMINATION

consistent there has been fair, and thorough examination, in light of the Remarks by the Applicant (p. 4, line 11 etc.) in the Response to the Final Rejection filed July 18, 2001, recalling the fact that the initial Examiner in this PCT National Stage application was Mr. Ackerman, who did not have the amendments to the claims from the PCT Sec. resulting in a premature Final Action by Examiner Knight on July 21, 2000 (Paper 14) which was later withdrawn, but nevertheless prejudiced the Applicant by requiring him to resubmit previous arguments, delaying development of the issues to a much later stage ?

16) FAIRNESS IN TREATMENT OF APPLICANT

Whether Applicant is being treated unfairly because, in a phone conversation with the undersigned on October 10, 2001, in response to a request for another interview, which was denied, the Examiner stated that he could not carry out a proper search since the invention had so many applications?

17) EXAMINER'S BURDEN IN CONDUCTING PRIOR ART SEARCH

Whether the Examiner's difficulty in searching the prior art thoroughly is a problem to be placed upon the Applicant ?

18) EXAMINER'S REJECTION OF THE CLAIMS - INTENT OF USER

Whether the Examiner's rejection of the claims which relate to a toy embodiment (claim 47) is proper, based on the Examiner's statement in the Final Rejection of 1/19/01 (Apx. 7, p. 4, line

11) that "a toy is anything that can be used for amusement.....any object can be a toy since it depends on the intent of the person using the device", thus introducing the element of user intent as a structural basis for claim rejection?

7. GROUPING OF CLAIMS

The claims relate to a mechanism which has many practical applications, such that the broadest claim, claim 1 can be combined with many different subclaims, to read on many useful devices which incorporate the inventive mechanism. Therefore, it is believed that the claims do not stand or fall together, since they are drawn so as to be separately patentable, each subclaim covering one of various practical devices, which is presented in the specification and drawings.

8. ARGUMENT

1) REJECTION OF ENTRY OF 7/18/01 AMENDMENT

The Advisory Action was improper, and the rejection and non-entry of the amendment in response to the Final Rejection was improper, since the amendment did <u>not</u> raise new issues. The Examiner provides a brief explanation of the new issue on the last page of the Advisory Action of 8/1/01 (Apx. 9) as follows:

"Continuation of 2 Note: The first linking means being connectable to an additional element was not claimed previously, nor was a search conducted for an additional element".

Insofar as the Applicant understands the rejection, it is Applicant's position that the amendment was a good-faith attempt to advance the prosecution, by modifying the claims, and

Clarifying the text where necessary, to overcome the prior art. Unfortunately, this amendment was dealt with, in Applicant's opinion, in summary fashion by the Examiner, and elicited a "standard" response in the Advisory Action, and was not reviewed and well-considered, and this has caused the Applicant undue delay and harm in finishing the patenting process.

2) GROUNDS FOR REJECTION OF ENTRY OF AMENDMENT

In the Response filed 12/21/00 (Apx. 6), the Examiner is specifically requested in the Remarks at p. 5, third paragraph to review Figs. 1-6. The "additional element" which is the "new issue" is shown in the embodiments of Figs. 1-6, specifically the embodiments of Figs. 2-3 showing a 3-element construction. The text description is given at p. 8, last paragraph, through p. 9, line 12, and this section is cited in the Remarks at p. 5 of the 12/21/00 (Apx. 6) response.

Even in the 2-element construction described in the specification at p. 8, lines 11-24, a "movable activation handle 116" is mentioned, which can also be considered an "additional element" for purposes of claim construction and interpretation.

Applicant submits that the "additional element" is \underline{not} a new issue, and was raised in prior Remarks of the 12/21/00 response.

The text amendment to clarify the term "hand-movable" was <u>not</u> a new issue, as this recitation was contained in original claim 4, and more importantly, this change in terminology was already introduced in the previous amendment filed 12/21/00, as "hand-holdable". This is further discussed in the Summary of the Invention (item 5 of this Appeal Brief), with text references. The Examiner initially objected to this amendment in the 1/19/01

Office Action (Apx. 7), so Applicant submitted a better clarification based on the claim 4 recitation, and the Applicant should not and cannot be penalized for attempting to improve and resolve terminology so as to remove objections/rejections.

"new" issue relates to the Furthermore, if the "additional element" or the terminology associated with "hand-holdable/hand-movable", why was the Examiner willing to reach agreement on the claim language, as indicated by the Interview Summary of 8/22/01 (Apx. 10), without raising these problem? Evidently, the video amendments/terminology as a presenation was convincing, and we have the Examiner's own notes (Apx. 10) confirming these amendments are not really "new issues".

3) GROUNDS FOR REJECTION OF ENTRY OF AMENDMENT

The Advisory Action of 8/1/01 (Apx. 9) was improper in rejecting the above-mentioned amendment, since if it had been entered, clearly it would have placed the application in better form for appeal, by materially simplifying or reducing the issues for appeal, so that the focus could be placed on the question of whether the "additional element" or the (previous) "hand-holdable" or (later) "hand movable" terminology were "new issues".

4) INTERVIEW SUMMARY - DETAILS OF AGREEMENT REACHED

There is <u>no mention</u> in the Interview Summary of a preamble amendment which results in a "closed" list of embodiments. For this reason, Applicant's representative, knowing of the many varied applications of the invention, could agree to reach agreement, as indicated, and accept a preamble amendment in-line with the Examiner's guidelines, as long as it did not preclude

"intended use must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art."

There can be no argument that the type of preamble amendment which the Examiner was prepared to accept, per the Interview Summary, was a list of devices to which the invention could be applied, and this list did not create any structural limitations in the devices being claimed. This is clear, since each device of a given type could have many design variations on its own, but these devices were to be claimed in combination with the inventive device, so that the only structural limitations were to be drawn from the body of the claim, and the structural limitations of the body of the claim could easily stand alone. Thus, no patentable weight could be given to this list of applications in the preamble, and the Examiner's position that it be a closed list, and only a closed list is acceptable, is improper in being made a requirement for patentability.

The Board's attention is also directed to the fact that the Applicant is not new to the patenting process in the US, and holds US Patent Nos. 5,324,086 (under Reissue proceedings), 5,322,334, and 5,881,601, all of which issued without requiring Field-of-Use restrictions in the preamble. Therefore, Applicant cannot understand why such a preamble requirement is being introduced in the instant application, and is opposed to restrictive language.

6) EXAMINER REFUSAL OF REQUEST FOR ANOTHER INTERVIEW

The Examiner wrongly and unfairly rejected the attempt of the Applicant's representative to set another interview, to clarify the preamble language, which was an issue the Examiner himself set

up in the Interview Summary, so that on the one hand, the Examiner created a new requirement, and on the other hand, he refused to discuss it face-to-face, when the only opportunity to do so is presented to him by Applicant's representative, traveling from overseas. This <u>cannot</u> be said to be in-line with the stated USPTO policy of achieving the best results and serving the inventor population's needs efficiently.

7) 37 CFR 1.71 OBJECTIONS TO THE SPECIFICATION

The objection to the specification is improper, under 37 CFR 1.71 "hand-holdable" the term (now amended "hand-movable" by the unentered Amendment of 7/18/01), since there is a clear basis for the interpretation of this phrase in the specification. This was indicated above in relation to recitation contained in original claim 4, (which was incorporated into claim i.n the unentered Amendment of 7/18/01) to "hand-motion", which clearly means "hand-movable", and in addition, as was stated above, the illustration of this activity is clear from Figs. 5 and 6 where a man is shown operating the segments of telescopic tool 100, and this shows that the device is hand-movable, one hand moving in reference to the other. Further, as described with reference to Fig. 1, at p. 8, lines 11-24, and recited above, the specification clearly described manipulation.

8) SEC. 112 FIRST PARAGRAPH REJECTION

The rejection of claims 1-49 is improper, under Sec. 112, first paragraph, regarding the term "hand-holdable", now "hand-movable", and the specification does convey to a skilled person that the

inventor had possession of the claimed invention at the time of filing the application, as can be seen from the specification and drawings as mentioned above in the argument section (7).

9) SEC. 112 SECOND PARAGRAPH REJECTION

The rejection of claims 1-49 is improper, under Sec. 112, second paragraph, regarding the term "hand-holdable" now "hand-movable", since it is clear how to interpret such terminology, in view of the description, repeated above in the SUMMARY OF THE INVENTION, and especially with respect to Figs. 1-6, where it is easily seen that the objects being manipulated are "hand-movable", and the Examiner's concern of confusion, with "any object that can be held with outstretched hands, or..... that fit within the palm of a single hand", is misplaced and unnecessary.

10) SEC. 103(a) REJECTION- PIPES AND WILDING

The rejection of claims 1-3, 5, 8, 16-18, 36, 38, 41, 42, 45 and 47 was improper, as being unpatentable under 35 USC Sec. 103(a), over Pipes, in view of Wilding.

Pipes discloses a shuttle assembly of elements placed alongside one another with chains (66) mounted on sprocket wheels (48, 49, etc.). Pipes does not lend itself to driving motion provided by hand, and as the Examiner concedes, Pipes does not disclose controllably reversible motion.

Wilding discloses an automatic storage system, not a telescopic system, having conveyor apparatus for handling particulate products such as peanuts or cereal. An electronic controller 25 is applied to control the conveyor movements using electronic sensors such as a photocell, see col. 5, lines 29-32,

and col. 6, lines 53-57.

The application of an electronic controller to automated control systems as in Wilding can hardly be compared with the simple, controllably reversible motion provided by the system of the present invention. This is because as now recited in amended claim 1 as proposed in the non-entered amendment, the inventive system is hand-movable, meaning it can be moved by hand, while heavy, automated systems are typically not designed for manual operation. Therefore, an automated system such as Wilding does not provide a relevant teaching in this case and is not a basis for comparison, being electronic.

It would therefore be unreasonable to consider the combination of Pipes and Wilding as rendering the claims obvious, since a skilled person would not be prompted to combine them nor consider this combination to be obvious.

11) SEC. 103(a) REJECTION- WHITE AND WILDING

The rejection of claims 1-3, 5, 8-12, 16-19, 23 and 40 was improper, as being unpatentable under 35 USC Sec. 103(a), over White, in view of Wilding.

White discloses a collapsible structure which employs an arrangement of sprocket wheels and chains to allow telescopic movement of a sectioned structure. As can be seen by a careful reading of White, the telescopic elements (20, 23, 24 and 25) are on the upper portion of the structure, while the mechanism providing movement, including the chain 43, is below and separate from this.

This is unlike the invention, where the linking means is "arranged on the said (first and second) elements".

In addition, the requirement in White for wheels carrying the chains is not a requirement of the present invention. For example, Figs. 7-9 of the specification of the present invention show a linking means without chains comprising a single, double-toothed sprocket wheel, which converts the driving motion to a driven motion. Even 78 years after White was published, the practical applications do not exist and are also very different from those of the present invention.

The Examiner conceded that White does not disclose the use of a controller. Wilding, as stated above, is not applicable here for controlling the movement, since Wilding teaches an electronic controller for automated control systems, rather than the simple, controllably reversible motion provided by the system of the present invention. An automated system such as Wilding does not provide a relevant teaching in this case and is not a basis for comparison, since it is an electronic device.

It would therefore be unreasonable to consider the combination of White and Wilding as rendering the claims obvious, since a skilled person would not be prompted to combine them nor consider this combination to be obvious.

12) SEC. 103(a) REJECTION- WHITE AND WILDING, SANDBURG

The Sandberg reference, for its teaching of a hand crank, is not a basis for rejection since it adds nothing to the overall system of telescopic motion as presented by the invention. Sandberg teaches a fire escape within which only the extension motion which raises the ladder is controlled, while the retraction motion is not controlled and is provided by gravity. A hand crank in a gravity-dependent system does not teach controllably reversible motion,

nor does it teach how this could be achieved in combination with other components. Applicant respectfully requests that the Board carefully reconsider the scope of the invention, as now claimed, with respect to the limited teaching of Sandberg.

13) EXAMINER'S ANALYSIS AND CHARACTERIZATION OF REFERENCES

The Examiner concedes that Pipes does <u>not</u> disclose a controllably reversible device, and "forces" a combination with the Wilding reference for its teaching of an electronic controller, which is not readily applicable to a simple system as disclosed by the invention. The Applicant believes that the Examiner is using hindsight to "build" the Applicant's invention using the prior art references.

14) REASONABILITY OF EXAMINER'S POSITION ON REFERENCES

The Examiner has taken an unreasonable position, to make the references "fit" the rejection of the claims, for example, in the combined references of Pipes and Wilding, as above in 13. Proof of this statement is in the fact that the Examiner was willing to issue the case, as per the Interview Summary, if certain modifications were made to the preamble, but these modifications would not have any structural meaning in the preamble since the body of the claim could stand on its own, and the Examiner's willingness to allow claim 1 shows this.

The Board of Appeals is kindly requested to read the Remarks filed with the 7/18/01 response, particularly at p. 11 etc., containing summary arguments based on precedents, regarding the 103(a) rejections.

15) FAIRNESS, CONSISTENCY AND THOROUGHNESS OF EXAMINATION

As stated, the switch in Examiners between Examiner Ackerman and amendments which 34 and the PCT Sec. Examiner Knight problems in the Stage, caused National overlooked in the prosecution. The Examiner conceded that a premature Final Action was issued, and this proves the fact that the Examiner was unable to guide the prosecution with the required fairness, consistency and thoroughness. The Applicant has suffered as a result, and would prefer further prosecution, if necessary, to continue before a new and unbiased Examiner.

16) FAIRNESS IN TREATMENT OF APPLICANT

Applicant is being treated unfairly because the Examiner's statement that he could not carry out a proper search, since the invention had so many applications, is not a reason which can establish the lack of usefulness of another interview.

17) EXAMINER'S BURDEN IN CONDUCTING PRIOR ART SEARCH

The Examiner's burden in carrying out a proper search is not a problem which the Applicant can solve, and therefore placing this as a reason for denying another interview is to place the Examiner's burden on the Applicant, and is unfair.

18) EXAMINER'S REJECTION OF THE CLAIMS - INTENT OF USER

By looking to the "intent" of a person using the inventive device, the Examiner introduces the element of user intent as a structural basis for claim rejection, and this is not supported by any precedent known to Applicant's representative. It appears that the Examiner is "reaching" for a reason to justify his denial of a

patent for a very versatile, widely applicable invention. Somehow, Applicant perceives that the Examiner is afraid to issue a patent on a broad, well-defined and multi-faceted product. This position cannot be supported by the Appeals Board, as it unfairly denies the Applicant a proper scope of protection for his simple, but widely applicable mechanical invention.

9. RELIEF REQUESTED

The Appeals Board is hereby requested to rule in favor of the Applicant on the issues listed above, and to order entry of the amendment filed July 18, 2001 and allowance of the application with the preamble to claim 1 as proposed in the October 14, 2001 letter.

Alternatively, the Appeals Board is hereby requested to rule in favor of the Applicant on the issues listed in the attached material, and to order entry of the amendment filed 7/18/01 and withdrawal of the finality of the Office Action of 1/19/01, and continuation of the prosecution with a new and unbiased Examiner.

Respectfully submitted,

Edward Langer, Att. for Applicant

Reg. No. 30,564

9. APPENDICES

- 1. Annotated claim 1 as read on Fig. 1
- 2. Office Action (OA) of Oct. 28, 1998
- 3. Response to OA filed Apr. 30, 1999
- 4. OA of 7/21/00
- 5. Letter to Examiner of Nov. 10, 2000
- 6. Response to OA filed Dec. 21, 2000
- 7. Final Rejection (FOA) of Jan. 19, 2001
- 8. Resp. to FOA filed July 18, 2001
- 9. Advisory Action (AA 1) of Aug. 1, 2001
- 10. Interview Summary (IS) of Aug. 22, 2001
- 11. Letter to Examiner of Oct. 14, 2001
- 12. Advisory Action (AA 2) of Oct. 22, 2001

APPEAL BRIEF S/N 08/894,211 APPENDIX 1 - ANNOTATED VERSION OF CLAIM 1

1. (Thrice amended) A motion transmission and multiplication system use with systems, devices or structures that require movement of segments, to enable extendable and retractable motion, such as cleaning systems [Figs. 10-13, 15b, 21-23, 31, 32], measuring systems [Figs. 27, 28], hand-movable tools [Fig. 29], music instruments and accessories [Figs. 40, electrical and telecommunication devices [Figs. 48-52, 55], transportation and delivery systems [Figs. 46-47], shades [Figs. 44-45], sailing boats [Figs. 56-57], chairs, tripods 33-39], tables and tents Figs. 41-43], said motion transmission and multiplication system comprising:

at least first and second hand-movable elements [104, 106] each having anterior and posterior ends, said elements extending in the same orientation, each element having at least one point thereon connectable to a tool [107 - note: 107 in Fig. 1 drawing is an error to be corrected to be 101 per text] or other object; and

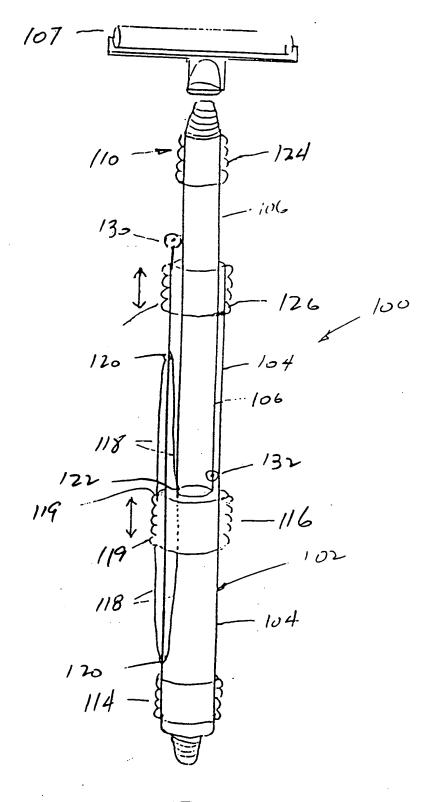
at least a first means [118] linking said first and second elements [104, 106] and being movable with respect to at least one of them, said first linking means [118] also being connectable to an additional element,

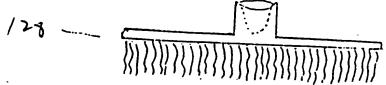
said first linking means [118] being arranged on said elements [104, 106] such that when said first linking means [118] is moved with a controllably reversible driving motion with respect to either of said anterior and posterior ends of a selected reference one of either of said first and second elements [104, 106], wherein said driving motion is in

a direction in-line with said orientation,

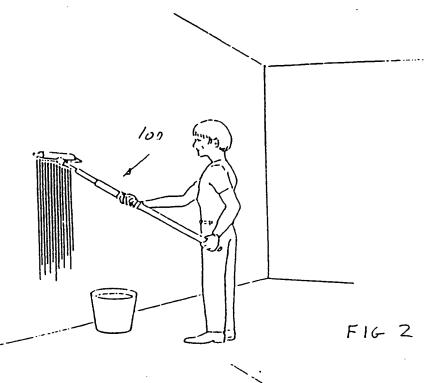
then said first and second elements [104, 106], and if connected, said additional element [116] are simultaneously provided with a controllably reversible and multipliable, nongravity dependent, linear-to-linear driven motion with respect to each other in-line with said orientation,

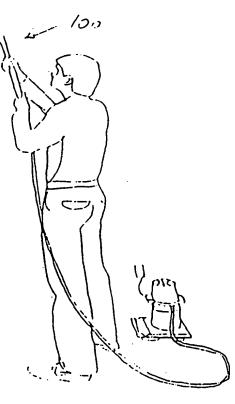
said driven motion being in the same direction as said driving motion, or reverse thereto, in accordance with which reference one of said first and second elements [104, 106] was selected in respect of said driving motion.



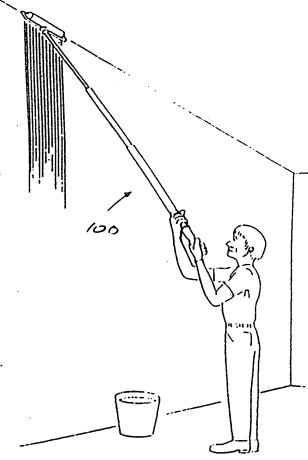


F15. 1

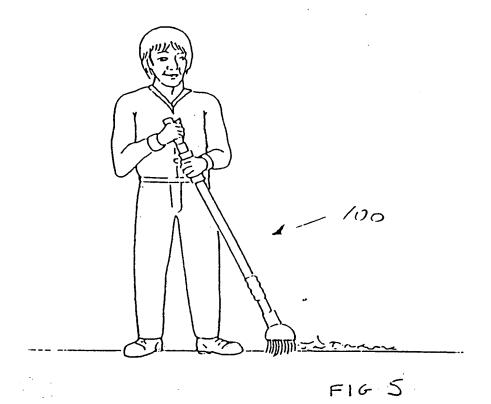


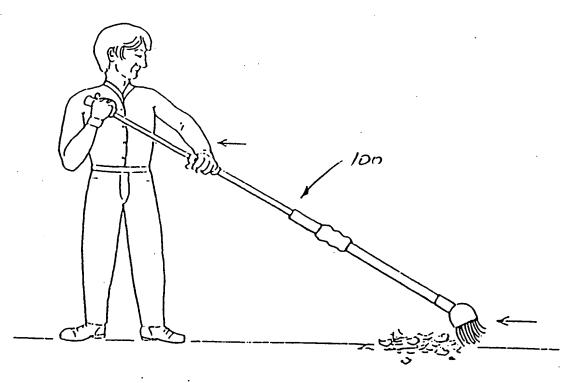






F16 3





F16 6





UNITED STATES DEPARTMENT OF COMMERCE **Patent and Trademark Office**

Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	AT	TORNEY DOCKET NO.	
08/ 894 ,21	1 07/30/	97 HAMMER	14	2036.018FCT	
		PM31/1028	EX	EXAMINER	
LEVISOHN LERNER BERGER & LANGSAM 757 THIRD AVENUE			ACCERMAN, M		
NEW YORK NY 10017			ART UNIT	PAPER NUMBER	
			D System		
			DATE MAILED:	10/28/98	

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Application No. Applicant(s) 08/894,211 Hammer Office Action Summary Examiner Group Art Unit William Ackerman 3626 Responsive to communication(s) filed on This action is FINAL. Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213. A shortened statutory period for response to this action is set to expire _____3 ___ month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a). Disposition of Claims Claim(s) 1-48 is/are pending in the application. Of the above, claim(s) ______ is/are withdrawn from consideration. Claim(s) _____ is/are allowed. Claim(s) is/are objected to. are subject to restriction or election requirement. Claims ___ Application Papers 🛛 See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948. The proposed drawing correction, filed on ______ is __approved __disapproved. X The specification is objected to by the Examiner. The oath or declaration is objected to by the Examiner. Priceity under 35 U.S.C. § 119 Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d). ∠All □ Some* □ None of the CERTIFIED copies of the priority documents have been received. received in Application No. (Series Code/Serial Number) 🗵 received in this national stage application from the International Bureau (PCT Rule 17.2(a)). *Certified copies not received: X Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e). Attachment(s) X Notice of References Cited, PTO-892 ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). ☐ Interview Summary, PTO-413 Notice of Draftsperson's Patent Drawing Review, PTO-948 Notice of Informal Patent Application, PTO-152

THE FOLLOWING PAGES ...

Art Unit: 3626

Priority

- 1. An application in which the benefits of an earlier application are desired must contain a specific reference to the prior application(s) in the first sentence of the specification (37 CFR 1.78).
- 2. If applicant desires priority under 35 U.S.C. 119(e) or 120 based upon a previously filed copending application, specific reference to the earlier filed application must be made in the instant application. This should appear as the first sentence of the specification following the title, preferably as a separate paragraph. The status of non-provisional parent application(s) (whether patented or abandoned) should also be included. If a parent application has become a patent, the expression "now Patent No.________" should follow the filing date of the parent application. If a parent application has become abandoned, the expression "now abandoned" should follow the filing date of the parent application.
- 3. Applicant has not complied with one or more conditions for receiving the benefit of an earlier filing date under 35 U.S.C. 120 as follows:

An application in which the benefits of an earlier application are desired must be copending with the prior application or with an application similarly entitled to the benefit of the filing date of the prior application.

The applicant claims priority to U.S. application No. 08/238,299 which was abandoned prior to the filing of the present application.

of Con fix Art Unit: 3626

Specification

- 4. This application does not contain an abstract of the disclosure as required by 37 CFR 1.72(b). An abstract on a separate sheet is required. $\mathcal{M} f \cdot \frac{\cos y}{\cos x} = 250$
- 5. The disclosure is objected to because of the following informalities: Page 7, line 23, fig. 44 is described but the drawings show figs. 44a-44d; page 7, line 24, fig. 45 is described but the drawings show figs. 45a and 45b; and page 7, line 25, fig. 46 is described but the drawings show figs. 46a and 46b..

Appropriate correction is required.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 7. Claims 1, 2, 5, 7, 8, 16-18, 36, 38, 41, 42, 45 and 47 are rejected under 35 U.S.C. 102(b) as being anticipated by Pipes U.S. Patent No. 4,388,033. Pipes discloses a motion transmission and multiplication system (10) comprising: at least first 12 and second 14 elements extending in the same orientation; and at least a first means 62 linking said first 12 and second 14 elements and being movable with respect to at least one of them, said first linking means 62 being arranged on said first element 12 such that when said first linking means 62 is provided with a driving motion

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(by pinions 22) in a direction of said orientation, said first 12 and second 14 elements are provided with a driven motion with respect to each other. First element 12 telescopically receives second element 14 and first linking means 62 is a flexible member. The speed control is the motor. Third element 16 is telescopically received in the second element 14. Linking means 62 is enclosed in the first element 12. Rollers (35, 43, 51, 57) guide the elements in tracks (36, 44, 52, 58).

System 10 is a conveyor. The room that the system is used in can be illuminated. A toy is anything that can be used for amusement. Any object can be a toy since it depends upon the intent of the person using the device.

8. Claims 1, 2, 5, 7-12, 16-18, 23, 24 and 40 are rejected under 35 U.S.C. 102(b) as being anticipated by White U.S. Patent No. 1,456,478. White discloses a motion transmission and multiplication system comprising: at least first 20 and second 23 elements extending in the same orientation; and at least a first flexible means 43 linking said first 20 and second 23 elements and being movable with respect to at least one of them, said first flexible linking means 43 being arranged on said first element 20 such that when said first flexible linking means 43 is provided with a driving motion (by gearwheels 46, 48) in a direction of said orientation, said first 20 and second 23 elements are provided with a driven motion with respect to each other. First 20 and second 23 elements are rigid and telescope in side-by-side tracks. The first, second and third elements are rigid and driven by a screw 16. First 20, second 23, and third 24 elements are shutters.

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Claim Rejections - 35 USC § 103

- The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness 9. rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 10. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pipes. Pipes discloses all of the claimed invention except that the motion of the elements can be counter to the driven motion. The difference between the direction of motion is considered to be a matter of engineering choice in design. It would have been obvious to a person having ordinary skill in the art at the time of applicant's invention to change the direction of motion of Pipes as a matter of choice in design since applicant has not set forth that the direction of motion solves any stated problem or is for any particular purpose and the device of Pipes works equally as well.
- 11. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pipes in view of Sandberg U.S. Patent No.326, 336. Pipes discloses all of the claimed invention except the driving motion being provided by hand motion of said linking means with respect to an end of either of said first and second elements. Sandberg shows the use of a hand crank G in an analogous art for the purpose of allowing hand operation. It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to provide the motion transmission and multiplication system of Pipes with a driving motion provided by hand motion of said linking means with respect to an end of either of said first and second elements as taught by Sandberg in

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order to allow hand operation. Making an automated device operable by hand is not considered

to be patentable.

Allowable Subject Matter

12. Claims 6, 13-15, 19-22, 25-35, 37, 39, 43, 44, 46 and 48 are objected to as being

dependent upon a rejected base claim, but would be allowable if rewritten in independent form

including all of the limitations of the base claim and any intervening claims.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure. Metz et al., Bradford, Badger, Steidle, Mason, Calhoun, Kmieliauskas, Schweda, Van

Fleet, Price, Musto, Karapita, Bernardi, Lombardi, Sargent et al., Andrews, Wu, Cottle, Shen,

Chae et al. and Huang are cited to show similar telescoping assemblies.

14. Any inquiry concerning this communication or earlier communications from the examiner

should be directed to William Ackerman whose telephone number is (703) 308-7908.

Anthony Knight

Supervisory Patent Examiner

Group 3600

WGA

October 25, 1998

U.S. DEPARTMENT OF COMMERCE-Patent and Trademark Office

Application No. 08/894211

NOTICE OF DRAFTPERSON'S PATENT DRAWING REVIEW

B. Objected to by the Draftperson under 37 Cr	ED 10.
A not objected to by the Draftperson under 37 CR I drawings whe necessary. Corrected drawings must be submitted accoording. DRAWINGS. 37 CFR 1.84(a): Acceptable categories of drawings Black ink. Color.	FR 1.84 or 1.152. .84 or 1.152 as indicated below. The Examiner will require submission of new, corrected ording to the instructions on the back of this notice.
offected drawings	.X4 or 1 150 .
DRAWINGS. 37 CFR 1.84(a): Acceptable categories of drawings	riding to the instructions on the back of this
Diack Ink. Color. Color. Calegories of drawings	S: 7 SECTION COrrected
Color drawing are not acceptable until petition is granted.	" SECTIONAL VIEWS 37 CER 1 010
Fig.(s) Fig.(s)	Hatching not indicated for sectional portions of an object.
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PE OF PAPER. 37 CFR 1.84(e)	Views not on the
	9. SCALE. 37 CFR 1.84(k)
Paper not flexible, strong, white and durable. Fig.(s)	57 CFK 1.84(k)
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folds, copy machine marks not acceptable. (toothin)	Fig.(c) Villus III February
Mylar, vellum paper is not acceptable (too thin) Fig(s)	IO. CHARACTER OF LINES
Fig(s)	Lines, numbers & letters not uniformly thick and well defined,
OF PAPER. 37 CFR 1.84(F): Acceptable sizes:	clean, durable and black (poor line quality).
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— 21.6 cm by 27.9 cm (8 1/2 x 11 inches)	11. SHADING. 37 CFR 1.84(m)
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ings sileels not the co-	Solid black areas pale. Fig.(s)
INS. 37 CFR 18 4(g): A	Shade lines, pale, rough and blurred. Fig.(s) 12. NUMBERS, LETTERS & PETERS 12.
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.5 cm left 2 s	Numbers and reference characters not plain and legible.
SIZE: 8 1/2 x 11	Fig. (a)
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Margins not acceptable. Fig(s)	Figure legends are poor. Fig.(s) Numbers and reference ob-
left(1)	Numbers and reference characters not oriented in the same
right (R) Bottom (D)	direction as the view. 37 CFR 1.84(p)(3) Fig.(s) Engligh alphabet not used. 27 CFR.
-FR 184(b)	English at 1 Fig. (c)
ER: Specification and	Engligh alphabet not used. 37 CFR 1.84(p)(3) Fig.(s) Numbers, letters and reference characters must be at least 32 cm (1/8 inch) in height. 37 CFR 1.84(p)(3) Fig.(s)
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ews connected by projection lines or lead lines.	13. LEAD LINES 37 CEP 1 04 5 CFR 1.84(p)(3) Fig.(s)
	Lead lines cross and
	Lead lines cross each other. Fig.(s)
	Lead lines missing. Fig.(s)
CPGE CPO: 2.U.	14 NIIMBERING OF SHEETS OF DRAWINGS. 37 CFR 1.48(t)
- • 11.	

					Application No. Applicant(s) O8/894,211		Hammer		
		Notice of Refe	Examiner W	Examiner William Ackerman		Group Art Unit 3626	·		
	U.S. PATENT DOCUMENTS								
	DOCUMENT NO. DATE NAME				CLASS SUBCLASS				
1	A	198,465	12-1877	Metz			135	141	
1	В	326,336	9-1885	Sandberg			212	264	
	С	399,313	3-1889	Bradford			182	208	
1	D	1,277,285	8-1918		Badger			84	412
-	Ε	1,325,053	12-1919		Steidle			52	115
	F	1,456,478	5-1923		White			52	67
	G	2,240,794	5-1941		Mason	W-1-1		254	264
	н	2,384,279	9-1945		Calhoun			52	121
1		2,546,452	3-1951		Kmieliausk	ıs		84	412
	١	2,776,168	1-1957		Schweda			239	587.4
	к	2,795,050	6-1957		Van Fleet			33	757
	L	2,822,067	2-1958		Price			52	121
	M 3,076,263 2-1963 Musto				30	317			
			FOF	REIGN PATENT DO	CUMENTS		-		
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Notice of References Cited			08/894,211	Applicant(s)	Hamme	:r	
			Examiner William Ackeri	man	Group Art Unit 3626		Page 2 of 2
	 	U.	S. PATENT DOCUMENTS				
+-	DOCUMENT NO.	DATE	NAME			CLASS	SUBCLASS
A	3,822,051	7-1974	Karapita			248	333
В	4,068,673	1-1978	Bernardi			160	22
C	4,388,033	6-1983	Pipes			414	282
D	4,606,525	8-1986	Lombard	i		248	460
E	4,779,650	10-1988	Sargent et	al.		137	899
F	5,037,057	8-1991	Andrews			248	460
G	5,267,583	12-1993	` Wu			297	423.26
Н	5,259,664	11-1993	Cottle			135	24
	5,267,712	12-1993	Shen			248	179.1
Ü	5,315,795	5-1994	Chae et al			52	113
к	5,493,480	2-1996	Huang			362	102
L							···
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Patent and Trademark Office -892 (Rev. 9-95)



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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: HAMMER, Mordechai

Serial No.

08/894,211

Filed

July 30, 1997

_For

EXTENSIBLE AND RETRACTABLE ELEMENTS AND

VARIOUS USES FOR THE ELEMENTS

Group Art Unit 3626 Examiner: W. Ackerman

Raanana, Israel April 25, 1999

Hon. Commissioner of Patents and Trademarks Washington, D.C. 20231

Sir:

AMENDMENT

In response to the Office Action mailed October 28, 1998, kindly amend the above-identified application as follows:

In the specification:

On page 1, after the TITLE, kindly add the following:

"CROSS-REFERENCE TO RELATED APPLICATIONS:

The present application is a National Stage application of PCT/US96/01209 and is related as a continuation-in-part of US patent application S/N 08/088,570 filed 9 July 1993, now US

Patent No. 5,881,601 issued March 16, 1999 (which was a CIP of US patent application 923,657 filed 3 August 1992, now US Patent No. 5,322,334 issued 21 June 1994, which was a CIP of US patent application 912,415 filed 13 July 1992, now US Patent No. 5,324,086 issued 28 June 1994); and is related as a continuation-in-part of US patent application S/N 08/238,299 filed 5 May 1994, now abandoned (which was a CIP of US patent application 912,415 filed 13 July 1992, now US Patent No. 5,324,086 issued 28 June 1994), and also a CIP of US patent application 923,657 filed 3 August 1992, now US Patent No. 5,322,334 issued 21 June 1994, which was a CIP of US patent application 912,415 filed 13 July 1992, now US Patent No. 5,322,334 issued 21 June 1994, which was a CIP of US patent application 912,415 filed 13 July 1992, now US Patent No. 5,324,086 issued 28 June 1994)."

On page 7, line 23, kindly delete "Fig. 44 shows" and substitute --Figs. 44a-d show--;

line 24, kindly delete "Fig. 45 shows" and substitute --Figs. 45a-b show--;

line 25, kindly delete "Fig. 46 shows" and substitute -Figs. 46a-b show--.

Kindly add the "ABSTRACT OF THE DISCLOSURE" enclosed herewith (as page 61), which is explained in the reference in the REMARKS.

In the claims:

Kindly amend claim 1 as follows:

1. (As amended) A motion transmission and multiplication system comprising:

at least first and second elements extending in the same orientation, each having at least one point thereon

connectable to a tool, object and the like; and

at least a first means linking said first and second elements and being movable with respect to at least one of them;

element] elements such that when said first linking means is provided with a controllably reversible driving motion in a direction [of] in line with said orientation, said first and second elements are provided with a controllably reversible and multipliable driven motion with respect to each other in line with said orientation.

Kindly amend claim 4 as follows:

4. (Once amended) The system of claim 1 wherein said driving motion is provided by hand motion of [said linking means] either one of said elements with respect to [an end of] either one of said first [and second elements] linking means and the other element.

In claim 24, line 2, after "mounted" kindly add --on--.

In claim 39, line 2, kindly delete "opens and closes" and substitute --open and close--.

Kindly amend claim 48 as follows:

48. (As amended) The system of claim 1 wherein either of said first and second elements has mounted at an end thereof a surface for supporting at least one of a tool, [and] an electrical device, a device for telecommunications, control home entertainment and the like, with flexible wiring, cable, tubes

and the like, being extendible <u>and retractable</u> during motion of said first and second elements, at least one of said first and second elements being supported [overhead] in a room to enable positioning of said surface at a desired position.

Kindly add new claim 49 as follows:

49. The system of claim 1 further comprising a spring connected to at least one of said first and second elements to provide a force for reversing said reversible driving motion.

REMARKS

Applicant has carefully considered the Office Action of October 28, 1998 rejecting all of the claims. The present response is intended to be fully responsive to all points of rejection raised by the Examiner and is believed to place the application in condition for allowance. Favorable reconsideration and allowance of the application are respectfully requested.

The present application is the National Stage of PCT patent application PCT/US96/01209. The amendment is presented in relation to the arrangement of the text which was originally filed with the PCT, not the published version, and this matches the Examiner's comments in para. 5 of the Office Action about page 7 and line numbers. The Abstract originally filed with the PCT application was amended to shorten its length, but it is believed that the original length is in accordance with US regulations, and this original Abstract is submitted herewith, to be entered as text on page 61, attached herewith.

The drawing references noted by the Examiner have been amended to remove inconsistencies with the text, and it is requested that a requirement for formal drawing corrections be held in abeyance until an indication of allowance has been received.

Claims 1, 4, 24 39 and 48 have been amended. New claim 49 has been added. Thus, claims 1-49 remain in the case.

In a conversation with SPE Anthony Knight on April 15, 1999, the undersigned Applicant's attorney noted that the claim amendments which were submitted on March 14, 1997 in response to

the Written Opinion in the PCT case (Art. 34 amendments) were <u>not</u> entered into the present National Stage US application, for some reason.

A copy of the published PCT application with the replacement pages reflecting Art. 34 amendments is attached.

It is respectfully requested that the Examiner review his comments once again, after taking into account the above submitted claim amendments (which were submitted in the PCT per Art. 34), and after taking into account that the present application claims priority from the earlier applications listed, so that a uniform approach can be developed to the various claims presented in those prior applications and the present application.

More specifically, it is respectfully suggested that the Examiner consider the need for providing a new Office Action taking into account the fact that the PCT patent application PCT/US96/01209 was filed for US purposes as a continuation-in-part application, and that some of the claims in the chain of applications recited above in the cross-reference information amended text) have issued as patents. In addition, it is noted that the Applicant has a pending re-issue proceeding for patent 5,324,086, under re-issue application S/N 08/936,486.

Also attached to this response is a copy of the Art. 34 amendments submitted on March 17, 1997, including claim amendments and arguments regarding cited prior art. The arguments are relevant to the prior art cited by the Examiner in the present Office action, and these arguments are repeated below.

It is the object of the present invention to overcome the problems of existing products exhibiting telescopic movement,

and provide a system of telescopic elements for multiplying the effective physical work achieved by simple hand and leg movements, in controlling the telescopic motion of structures and their length. The invention can be implemented in a very large number of fields including cleaning systems, vacuum cleaners, measuring rods, tools, paint rollers, wall scrapers, mustic stands and instruments, parasols, shades, curtains, sailing boat masts, and structures such as chairs, tripods, tables, tents etc.

As amended, independent claim 1 now includes a limitation indicating that the driving motion of the system is controllably reversible, such that both extension and retraction motions are under full, reversible and multipliable control of the mechanism.

In addition, in claim 1, a limitation on the orientation of the driving motion has been clarified, to indicate that the driving motion is provided in a direction in line with the orientation of the elements. This defines a relationship between the driving and driven motions, such that a linear driving motion provides a linear driven motion, and this is described as linear-to-linear motion.

Claim 1 further includes the limitation that the elements are connectable to a tool or object which is to be used in performing some useful work, such as cleaning, painting, etc.

Thus, as now amended, if a hand motion (as per claim 4) is applied to provide the driving motion between an end of either the first and second elements and the linking means (loop), as in the embodiment of Fig. 1, then one of two types of resulting

extension and retraction motion occurs, either as illustrated in Figs. 2-3, or as Figs. 5-6. The first type of motion is shown in Figs. 2-3 and occurs when tool 100 is held by handle 116 which is attached to the loop, and moved toward handle 114, so that the driven motion is <u>counter</u> to the driving motion of handle 116 with respect to handle 114, and this is claimed in claim 3.

The second type of motion is shown in Figs. 5-6 and occurs when tool 100 is held by handle 126 which is moved away from handle 124, so that the driven motion of the linking means (loop) is in the same direction as the driving motion of handle 126 with respect to handle 124 (claim 2).

The specification refers to this directional feature and its advantages in the description at page 8, last paragraph, beginning with the words "in this activity, the operating hand moves handle 116 in the opposite direction to the motion of segment 106, thus enabling the user to reach greater distances.." The other mention of the directional feature is at page 9, line 3, where the description mentions "the device can be operated in the same direction as the hand motion.." The advantage of this operation is given at the end of the paragraph, line 11, describing this arrangement as "effective for working in lower places". A particular problem is solved by the inventive tool at high and low locations, and it is solved by this unique motion.

Thus, as now amended, the ability to control multipliable driven motion, in both extension and retraction movement, is what gives the present invention an advantage over other telescopic systems.

For example, in Figs. 7-8, there are shown 2-element

arrangements where the driven motion is a controllably multipliable result of the driving motion. If the gears 142, 144 are selected with different diameters, the motion is transferred according to the ratio between them. The same effect is provided using the toothed rail 156 with gear 142, per Fig. 9.

Claim 49 refers to a construction such as that shown in Fig. 54, where a spring force reverses the driving motion.

The Examiner has rejected independent claim 1 and the various groupings of dependent claims under Sec. 102(b) as being anticipated by Pipes and White, and under Sec. 103 as being unpatentable over Pipes, and Pipes in view of Sandberg.

Patent 4,388,033 to Pipes discloses a US assembly of elements placed alongside one another with chains mounted on sprocket wheels (48, 49 etc.) In contrast, present invention allows for telescopic motion of nested members, which is impossible with Pipes, since the elements and chains are nested. requirement in Pipes for wheels carrying the The chains is not a requirement of the invention. Pipes does not lend itself to driving motion provided by hand, nor controllably reversible motion. The present invention allows connection of elements which move together with the the moving members, but Pipes does not allow connection to such elements, except the end shuttle which carries the load. The practical applications also very different.

Comparison of Fig. 1 of Pipes with Fig. 27b of the present application shows clearly the three member construction, and the difference in the linking means arrangements is visible.

A single loop is used in the present invention, while Pipes uses chains with double the length, to achieve motion of the elements.

There is no disclosure in Pipes of controllably reversible motion in line with the orientation direction, which is provided by the present invention as now claimed by the amendments to independent claim 1. Therefore, Pipes does anticipate the claims under Sec. 102(b).

As stated in the decision in In Re Marshall, 198 USPQ 344 (1978), "To constitute an anticipation, all material elements recited in a claim must be found in one unit of prior art...". Since Pipes neither 1) identically describes the invention nor 2) enables one skilled in the art to practice it, Applicant deems the 102(b) rejection improper, and respectfully requests that it be withdrawn.

US Patent 1,456,478 to White discloses a collapsible structure which employs an arrangement of sprocket wheels and chains to allow telescopic movement of a sectioned structure.

In contrast, the present invention allows for telescopic motion of nested members, which is impossible with White, since the elements and chains are not nested. White does not lend itself to driving motion provided by hand, nor controllably reversible motion. The requirement in White for wheels carrying the chains is not a requirement of the invention.

For example, Figs. 7-9 of the present application show a linking means without chains comprising a single, double-toothed sprocket wheel, which converts the driving motion to a driven motion. Even 76 years after White was published, the practical applications do not exist and are also very different

from those of the present invention.

Thus, as stated above, White does not 1) identically describe the invention nor 2) enable one skilled in the art to practice it, and Applicant deems the 102(b) rejection improper, and respectfully requests that it be withdrawn.

Examiner has also cited US Patent 326,226 The to from the year 1885 to indicate that telescopic systems Sandberg, were known in the prior art. While the general telescopic systems are indeed known, no invention prior to the present one has means for maintaining full, reversible and multipliable control of the extension and retraction motion. Applicant respectfully requests Examiner carefully reconsider the scope of the that the as now claimed, with respect to the limited teaching invention, of the Sandberg reference.

Sandberg teaches a fire escape within which only the extension motion which raises the ladder is controlled, while the retraction motion is not controlled and is provided by gravity. Unlike Sandberg, the present invention allows controllable retraction motion, such that as shown in Figs. 5-6, the retraction motion produces a useful effect in sweeping. Sandberg cannot accomplish this as its retraction motion is gravity-dependent.

Furthermore, the Sandberg reference uses a tilting mechanism to direct its extension motion, while the present invention needs no such mechanism, as illustrated, again for example, by the hand motion used in the sweeper of Figs. 5-6. The extendable elements of Sandberg can only move within one another,

while the present invention allows for motion of elements one alongside the nother, such as in the curtain opening and closing application, see Fig. 44b.

The provision by the present invention of a tool attached to a system providing controllably reversible driving motion in-line with the orientation of the elements, and a controllably reversible driven motion, is deemed not to have been obvious since the teaching of Pipes, White and Sandberg do not disclose this, nor do they disclose a tool for performing work.

In making the combination of references proposed by the Examiner, the question is raised whether the references themselves would suggest doing so, as stated in the decision of In Re Lintner (172 USPQ 560, 562, CCPA 1972):

"In determining the propriety of the Patent Office case for obviousness in the first instance, necessary to ascertain whether or not reference teachings would appear to be sufficient for one of ordinary skill in the relevant having the references before him to make the combination proposed substitution. other modification."

Similarly, In Re Regel (188 USPQ 136 CCPA 1975) decided that the question raised under Sec. 103 is whether the prior art taken as a whole would suggest the claimed invention to one of ordinary skill in the art. Accordingly, even if all the elements of a claim are disclosed in various prior art references, the claimed invention taken as a whole cannot be said to be obvious without some reason given in the prior art why one of ordinary skill would have been prompted to combine the teachings of the references to arrive at the claimed invention.

Simply put, and as stated in In re Clinton (188 USPO

365 CCPA 1976), "do the references themselves ... suggest doing what appellants have done", such that there is a requirement that the prior art must have made any proposed modification or changes in the prior art obvious to do, rather than obvious to try.

It is respectfully put forward by Applicant that there is not any substantial reason to view the combination of references as obvious, since none of them suggests controllably reversible motion in-line with the member orientation, as provided by the invention. To say that a such a combination is obvious to try, as the Examiner seems to do, is one thing, but to recognize the above-outlined design advantages is another thing.

Therefore, independent claim 1 is deemed to be patentable over the prior art, and the dependent claims are likewise deemed patentable being based thereon.

In view of the foregoing amendments and remarks, all of the claims remaining in the application are deemed to be allowable. Further reconsideration and allowance of the application is respectfully requested at an early date.

> Respectfully submitted, Edward Langer, Attorney Reg. No. 30,564

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In view of the foregoing amendments and remarks, all of the claims remaining in the application are deemed to be allowable. Further reconsideration and allowance of the application is respectfully requested at an early date.

Respectfully submitted,
Edward Langer, Attorney
Reg. No. 30,564

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: HAMMER, Mordechai

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Serial No.

08/894,211

Filed

July 30, 1997

For

EXTENSIBLE AND RETRACTABLE ELEMENTS AND

VARIOUS USES FOR THE ELEMENTS

Group Art Unit 3626 Examiner: W. Ackerman

Raanana, Israel April 25, 1999

Hon. Commissioner of Patents and Trademarks Washington, D.C. 20231

PETITION FOR EXTENSION

Sir:

In accordance with 37 CFR 1.136(a), Applicant hereby petitions to extend the time for response to the Office mailed October 1998, for which purpose there is enclosed 28, herewith a check in the amount of \$444.00 to cover the three-month extension fee (\$435), up to and including Wednesday April 28, 1999, and a fee (\$9) for an additional dependent claim.

The accompanying amendment presents one new dependent and it is believed that an additional filing fee required in accordance with the following calculation: Independent Total claims

1

3

Claims now pending Less: Highest number of claims previously paid for

49

(Small Entity) Fee due:

 $0 \times \$39.00 +$

 $1 \times \$9.00 =$ \$ 9.00

the event of an insufficiency or omission please contact me immediately so that I may arrange for payment.

Respectfully submitted.

Edward Langer, Acty. for Applicant Registration No. 30,564

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15:17

P. 02 444



UNITED STATES DEPARTMENT OF COMMERCE

Patent and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS

Washington, D.C. 20231

APPEICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | 08/894,211 07/30/97 | HAMMER | M 2036.018PCT

PM82/0721

LEVISOHN LERNER BERGER & LANGSAM 757 THIRD AVENUE NEW YORK NY 10017

ARTE

EXAMINER

KNIGHT, A

ART UNIT PAPER NUMBER

DATE MAILED:

07/21/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

docketed

		Application No.	Applicant(s)				
	Office Action Summary	08/894,211	HAMMER, MORDECHAI				
	, , , , , , , , , , , , , , , , , , , ,	Examiner	Art Unit				
		Anthony Knight	3626				
	- The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
	A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.						
	If the period for reply specified above is less than thirty (30) day be considered timely. If NO period for reply is specified above, the maximum statutory communication.	no for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will sidered timely. If the property is specified above, the maximum statutory period will apply and will expire SIV (so MONITUS Society and SIV).					
ļ	Status	y scalars, cause are appreciation to necom-	B ABANDONED (36 U.S.C. § 133).				
	1)区 Responsive to communication(s) filed on 30 A	pril 1999					
1	2a) ☑ This action is FINAL. 2b) ☐ This action is non-final.						
	3) Since this application is in condition for allowal closed in accordance with the practice under E	nce except for f <mark>ormal m</mark> atters, pn Ex parte Quayle, 1935 C.D. 11, 4	osecution as to the merits is 53 O.G. 213.				
	Disposition of Claims						
	4) Claim(s) 1-49 is/are pending in the application.						
	4a) Of the above claim(s) is/are withdrawn from consideration.						
	5) Claim(s) is/are allowed.						
	6)⊠ Claim(s) <u>1-4.19.26-29.32.33.35-40 and 42-49</u> is/are rejected.						
ful	0 7)⊠ Claim(s) <u>5-18, 20-25, 30, 31, and 34</u> is/are object						
16							
	8) Claims are subject to restriction and/or election requirement. Application Papers						
	9) The specification is objected to by the Examiner.						
	10) The drawing(s) filed on is/are objected to by the Examiner.						
			Avend				
	11) The proposed drawing correction filed on is: a) approved b) disapproved. 12) The oath or declaration is objected to by the Examiner.						
	Priority under 35 U.S.C. § 119						
	13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. ≤ 119(a)-(d).						
	a) All b) Some * c) None of the CERTIFIED copies of the priority documents have been:						
	1. received.						
İ	2. received in Application No. (Series Code / Serial Number)						
İ	3. received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).						
	" See the attached detailed Office action for a list of the certified copies not received.						
	14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).						
A	Hachront(s)						
16	Notice of References Cited (PTO-892) Notice of Draftsporson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	18) 🔀 Interview Summary (i 19) 🔲 Notice of Informal Pai 20) 🔲 Other:	PTO-413) Paper No(s). <u>13</u> . tent Application (PTO-152)				
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P. 04

08/894 211

Applicant has not complied with one or more conditions for receiving the benefit of an earlier filing date under 35 U.S.C. § 120 as follows:

An application in which the benefits of an earlier application are desired must be copending with the prior application or with an application similarly entitled to the benefit of the filing date of the prior application. Copendence does not exist between Application No. 08/238,299 and the present application. The claim for priority must be amended to remove Application No. 08/238,299 and its string of applications.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-49 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for falling to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 1 and 48, the phrase "and the like" renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "and the like"), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d). Applicant should note that the phrases "and the like" and "or the like" are considered to be similar.

Claims 19, 26-29, 32, 39, 40, and 42-47, the phrase "adapted for use" makes the scope of the claim unclear. While the examiner has assumed that applicant is claiming the combination, it can be argued that the claim is merely directed to the subcombination. Applicant is required to clarify the claim by

P. 05

positively reciting that "the system of claim 1 is a _____", if the claim is a combination claim.

The following is a quotation of the appropriate paragraphs of 35

U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 4, 19, 26-29, 32, 33, 35-40, and 42-49 are rejected under 35 U.S.C. 102(b) as being anticipated by Steldle, U.S. Patent No. 1,325,053. Steldle discloses a motion transmission and multiplication system comprising:

A first element (31) - The phrases "having at least one point thereon connectable to a tool, object and the like" is not considered to provide any limitation to the claim since the tower is attached to the submarine (1) and rings (32) are objects.

A second element (38) is attached to the first element.

A first linking means is controllably reversible for driving the first and second elements — The first linking means is comprised of the controllable pneumatic actuation of the mast (page 3, lines 46-50) and the spring biased drums (53) (see page 3, lines 67-73)¹.

The motion can be achieved by hand, see page 3, lines 80-83.

Means-plus-function clause are interpreted in accordance with MPEP § 2181 and the final guidelines for interpreting such clauses published in the Federal Register, Vol. 65, No. 120, pages 38510-16, June 16, 2000.

08/8/4/211

The mast includes a tool, such as the loop shown atop the mast in Fig. 1.

The control means for determining a working angle of the tool is the rigidity of the cylinders (31, 38, 48, 49). The angle is thus controlled or fixed with respect to the mast.

The pneumatic actuation device is contained within the first and second cylinders. The mast is rotatable with the submarine. The tracks are considered to be the cylinders that move side-by-side.

For the sake of completeness, claims 19, 26-29, 32, 39, 40, 42-47 have been rejected as if the claims are directed only to the subcombination. The phrase "adapted for" is considered to not provide any limitation to the claims since the structure is not positively claimed as a combination.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 3 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Steidle. Steidle discloses the claimed invention with the exception of the driven and driving motions being in opposite directions. The direction of motion is considered to be a matter of choice in design in the absence of and stated reason or solution to any stated problem and the device of Steidle works equally as well.

1/10/00

ESTABLES CONT.

08/844,211

ANSWER TO APPLICANT'S ARGUMENTS

Applicant has stated that some of the claims are claims contained in an issued US patent. This does not appear to be the case. However, if it is true, applicant is required to specifically point out the claims in this application and their corresponding US patent.

Applicant argues that the device of the present invention is controllably reversible. While this may not be true for Pipes, Steidle does disclose a device that is controllably reversible. Applicant should notethat means-plus-function clauses are given there broadest possible interpretation unless applicant specifically states that the basis for interpretation should be limited to the means disclosed in the specification and any equivalents. The device of Steidle does perform the functions as set forth in the claims and thus the claims are met. The drive of Steidle is considered to be linear and in-line.

Claims 5-18, 20-25, 30, 31, and 34 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is 08/894211

filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Knight whose telephone number is (703)308-3179. The examiner can normally be reached on 8-hour days.

The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7687 for regular communications and (703) 305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-2168.

AK July 16, 2000

Anthony Knight
Supervisory Patent Examiner

Group 3600

EDWARD LANGER, B.S.E.E., M.B.A., J.D.

ADVOCATE & PATENT ATTORNEY

312 GIRON CENTER, P.O.B. 410 RAANANA 43103 ISRAEL TEL: 972-9-7713585 FAX: 972-9-7713593 E-MAIL: edlanger@netvision.net.il

November 10, 2000 BY FAX (703) 305-7687

Mr. Anthony Knight, Supervisory Patent Examiner US Patent Office, Washington, D.C. 20231

URGENT

Re: US Pat. Appln. S/N 08/894,211 (PCT National Stage, filed July 30, 1997)

"EXTENDIBLE AND RETRACTABLE ELEMENTS AND VARIOUS USES FOR THE ELEMENTS"

Our File: 0878 Dear Mr. Knight,

For purposes of our upcoming meeting on Nov. 21 at your offices, at 3:30 PM, I would like to discuss the following:

- 1. Prior to your Final Office Action of July 21, 2000, we had submitted a response on April 28, 1999, but as you may recall, that response was not entered immediately due to a technicality with the fee, which was the Banks' fault. The case was abandoned and was later revived, and you began reviewing the case in detail at that point. In our brief meeting on May 22, 2000, I showed you a simple model of one of the versions of the telescopic motion.
- 2. In our response of April 28, 1999, page 6, third paragraph, we asked that you provide a <u>new Office Action</u>, since there were problems with the entry of the PCT Sec. 34 amendments, as detailed in the next paragraph. Thus, we were surprised to see that your latest Office Action of July 21, 2000, was a Final Office Action. This, in our opinion, is <u>premature</u> and should not have been considered as a Final Action, as it was not <u>necessitated</u> by the previous amendment, which only served to re-enter previously entered amendments.
- 3. We noted in our response of April 28, 1999 to the first Office Action of October 28, 1998, sent by Mr. Ackerman, that there were only 48 claims in his copy of the application. However, in a phone conversation between us on 15 April, 1999, it became clear that the file did <u>not</u> contain the Sec. 34 amendments, and you stated this. We had already filed these amendments in the PCT International Stage, on 14 March 1997, in which an additional claim was added, claim 49. This amendment was acknowledged in the IPER sent on 11 July 1997, in which your name appears as the Authorized Officer. Therefore, we concluded that Mr. Ackerman did not have the proper version of the amended claims before him when he made his comments in the first Office Action. This forced us to re-enter these amendments in our response of April 28, 1999.
- 4. We believe that the improper handling of the PCT Sec. 34 amendments by the USPTO, and Mr. Ackerman's lack of awareness of this fact, has been detrimental to the situation, and has prejudiced my client's position, since these amendments were not initially considered, when they were <u>already</u> in the file as stated in the IPER. Mr. Ackerman's prior art citations were not directed to the proper set of claims, and one round of exchange was wasted in prosecution.
- 5. Therefore, we ask that you consider withdrawing the final Office Action because of these irregularities, and inform us if a petition is needed to accomplish this. We need the extra round to focus on the claims, to allow a fair procedure which includes two exchanges, so that we are not pressured by a <u>first and Final Action</u>.
- 6. In any case, the Steidle reference currently cited in your Final Action is inappropriate, since it describes pneumatically-driven motion of individual sections in succession, not simultaneously, and the collapse of these sections depends on gravity, so that it is weight-driven, and is not controllably reversible. Further, the motion of the sections is not "in-line" with the motion mechanism, spring drum 53, and this is rotational-to-linear motion, not linear-to-linear motion. The construction is heavy and requires a supporting base.
- 7. In contrast, the present invention describes a motion transmission system in which the elements move simultaneously, with controllably reversible motion, in a hand-held system, operated from either end of the construction, without a requirement for a base to support the elements. The motion of the linking means is adjustably multipliable, with the linking means adjustably arranged on the elements, as can be seen in Figs. 10-15b, 22, 24, and 30, etc. The system of the invention is not dependent on gravity for the re-inserting the elements one within the other, while Steidle uses gravity, and hand rotation of the drum 53, as the sections collapse and the air escapes. As you stated, Steidle cannot provide oppositely-directed motion of elements.
- 8. Formal matters of listed co-pending applications will be corrected as needed. The wording "and the like" can be removed. The wording "adapted for use" in many claims can be amended to read "in combination with", as you suggested. Thank you for the opportunity to discuss these matters with you. Sincerely,

MEMBER OF ISRAEL & PENNSYLVANIA BARS

REGISTERED TO PRACTICE BEFORE ISRAEL AND U.S. PATENT OFFICES



APPLICANT: HAMMER, Mordechai

FOR: EXTENDIBLE AND RETRACTABLE ELEMENTS AND VARIOUS USES FOR THE

ELEMENTS

DOCKET NO.: / 0878

FILED: July 30, 1997

SERIAL NO. 08/894, 211



Receipt of the following application papers is evidenced hereon by the Official stamp of the U.S. Patent & Trademark Office:

Petition for Extension (2 Months)
AMENDMENT (9 Pages)
Credit Card Form in the amount of \$195

0878amd2.doc 19.12.00

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: HAMMER, Mordechai

Serial No.

: 08/894,211

Filed

: July 30, 1997

For

: EXTENSIBLE AND RETRACTABLE

ELEMENTS AND VARIOUS USES FOR THE

ELEMENTS

Group Art Unit 3626 Examiner: A. Knight

Raanana, Israel December 19, 2000

Hon. Commissioner of Patents and Trademarks Washington, D.C. 20231

Sir:

AMENDMENT

In response to the Office Action mailed July 21, 2000, (per Examiner, a <u>Non-final Action</u> - see Remarks) kindly amend the above-identified application as follows:

In the specification:

On page 1, in the section entitled "CROSS-REFERENCE TO RELATED APPLICATIONS:", line 9, after the words "of US patent application", kindly delete:

"S/N 08/238,299 filed May 5 1994, now abandoned (which was a CIP of US patent application 912,415 filed 13 July 1992, now US patent no. 5,324,086 issued 28 June 1994), and also a CIP of US patent application".

In the claims:

Kindly amend claim 1 as follows:

1. (Twice amended) A motion transmission and multiplication system comprising:

at least a first means linking said first and second elements and being movable with respect to at least one of them;

said first linking means being arranged on said elements such that when said first linking means is provided with a controllably reversible driving motion in a direction in line with said orientation, said first and second elements are simultaneously provided with a controllably reversible and multipliable, non-gravity dependent, linear-to-linear driven motion with respect to each other in line with said orientation.

In claim 19, line 1, kindly delete "adapted for use" and substitute --in combination--.

In claim 26, line 1, kindly delete "adapted for use" and substitute -in combination--.

In claim 27, line 1, kindly delete "adapted for use" and substitute -in combination--.

In claim 28, line 1, kindly delete "adapted for use" and substitute -in combination--.

In claim 29, line 1, kindly delete "adapted for use" and substitute -in combination--.

Kindly amend claim 48 as follows:

48. (Twice amended) The system of claim 1 wherein either of said first and second elements has mounted at an end thereof a surface for supporting at least a tool, electrical device, an а device for telecommunications, control, and/or home entertainment [and the like,] with at least one of flexible wiring, cable, and/or tubes [and the like,] being extendible and retractable during motion of said first and second at least one of said first and second elements being supported in a room to enable positioning of said surface at a desired position.

REMARKS

Applicant has carefully considered the Office Action of July 21, 2000 rejecting all of the Applicant wishes to express his appreciation to Examiner for the interviews conducted with the undersigned, Applicant's attorney, on May 22, 2000 and November 21, 2000. The Applicant also wishes to express his appreciation to the Examiner for the indication of allowable subject matter.

The present response is intended to implement the conclusions of the interview and be fully responsive to all points of rejection raised by the Examiner and is believed to place the application in condition for allowance. Favorable reconsideration and allowance of the application are respectfully requested.

The present application is the National Stage of PCT patent application PCT/US96/01209.

At the outset, it was agreed upon in the interview that the finality of the last Office Action is withdrawn.

The Applicant wishes to correct a typographical error appearing in the Remarks of the previous response, submitted April 30, 1999. On page 10, lines 6-7, the text should read "..therefore Pipes does <u>not</u> anticipate the claims under Sec. 102(b)".

It is requested that a requirement for formal drawing corrections be held in abeyance until an indication of allowance has been received.

Claims 1, 19, 26-29 and 48 have been amended. Thus, claims 1-49 remain in the case.

For the Examiner's convenience, and as a quick review, it is re-stated that the object of the present invention is to overcome the problems of existing products exhibiting telescopic movement. The invention provides a system of telescopic elements for multiplying

the effective physical work achieved by simple hand and leg movements, in controlling the telescopic motion of various structures and their length. The invention is applicable in many varied fields including cleaning systems, vacuum cleaners, measuring rods, tools, scrapers, music stands and instruments, rollers, wall parasols. shades, curtains, sailing boat masts, structures such as chairs, tripods, tables, tents etc.

As amended, independent claim 1 indicates that the driving and driven motions of the system elements occur simultaneously, that the elements are hand-holdable, and that the driven motion is non-gravity dependent. Further, as was previously explained, the motion is controllably reversible, such that both extension and retraction motions are under full, reversible and multipliable control of the mechanism.

In addition, claim 1 has been further amended to indicate that the motion of the elements is in-line with their orientation, achieving linear-to-linear motion.

The Examiner is referred to the previously filed Remarks indicating examples of this motion, described in the text, with reference to Figs. 1-6. The examples describe hand motion applied to develop driving motion between the first and second elements, and the linking means (loop), resulting in two types of extension and retraction motion, with driving and driven motions either in the <u>same</u>, or in <u>reverse</u> directions, as per claim 4.

The advantage of this operation is described in the text at page 8, last paragraph, through page 9, line 12, with reference to Figs. 1-6. In one case, where the operating hand moves the handle opposite the motion of segment 106, the user reaches greater distances, "which is good for working at heights..." In another case, where the operating hand moves in the same direction as the segment 104, this arrangement is "effective for working in lower places". Thus, it can be seen that the

inventive tool solves a particular problem at high and low locations, and it is solved by this unique motion.

Thus, as per amended claim 1, the ability to control multipliable driven motion, via simultaneous motion of segments during extension or retraction, via non-gravity dependent linear-to-linear movement, gives the present invention an advantage over other telescopic systems.

The Examiner has rejected independent claim 1 and the various groupings of certain dependent claims under Sec. 102(b) as being anticipated by Steidle. The Examiner has also rejected claim 3 under Sec. 103(a) as being unpatentable over Steidle.

The Steidle reference describes a telescoping tower, which operated by pneumatically-driven motion of individual sections, which are "elevated in succession", not simultaneously, as per page 1, line 29. The collapse of these sections depends on gravity, so that weight-driven, and is not controllably reversible. Further, the motion of the sections is dependent on the use of a spring drum 53, which is the motion mechanism, and is not "in-line" with the sections. This motion is rotational-to-linear motion, not linear-to-linear motion. The construction is heavy and requires a supporting base.

In contrast, the present invention describes motion transmission system in which the elements move simultaneously, with controllably reversible motion, a hand-holdable system, operated from either end of the construction, without a requirement for a base to support elements. The motion οf the linking multipliable, adjustably with the linking adjustably arranged on the elements, as can be seen in Figs. 10-15b, 22, 24, and 30, etc. The system of the invention is not dependent on gravity for the re-inserting the elements one within the other, while Steidle uses gravity, and hand rotation of the drum 53, as the sections collapse and the air escapes. As conceded by the Examiner in the Office Action, Steidle cannot provide driven and driving motion in opposite directions.

Applicant respectfully disagrees with the Examiner's statement that the directions of motion are a matter of "design choice". As stated above in these remarks, the ability to reverse these motions gives the present invention the advantage of having a design which solves the problems of reaching both high and low areas. Since the particular problems solved by the invention cannot be solved by the Steidle design, there is really no "design choice" which would have brought about these solutions.

It is respectfully maintained by the Applicant that the functional interpretation and applicability of the Steidle reference vs. the pending claims is a matter to be decided by the Patent Office, and ultimately, the courts, and any choice made now by the Applicant may be prejudicial to legal issues if these should arise in the future. Therefore, Applicant respectfully declines the opportunity to choose a basis for means-plus-function claim interpretation, but clearly, the intent is to achieve the broadest claims possible, as allowed by law.

Since the concept of the invention has many and varied applications, some of which may be developed in the future, Applicant wishes to have the broadest claim possible to allow for claim coverage wherever applicable.

There is no disclosure in Steidle of simultaneous, controllably reversible, linear-to-linear, non-gravity dependent motion of hand-holdable segments in line with the orientation direction, which is provided present invention as now claimed the amendments by independent claim 1. Therefore, Steidle does not anticipate the claims under Sec. 102(b).

As stated in the decision in In Re Marshall, 198 USPQ 344 (1978), "To constitute an anticipation, all material elements recited in a claim must be found in one unit of prior art...". Since Steidle neither 1)

identically describes the invention nor 2) enables one skilled in the art to practice it, Applicant deems the 102(b) rejection improper, and respectfully requests that it be withdrawn.

The provision by the present invention of reversible directions of driving and driven motions is deemed not to have been obvious, and is not a design choice, since the teaching of Steidle does not disclose this, nor does it disclose a device like that of the present invention.

In citing the Steidle reference under Sec. 103(a), the question is raised whether the reference itself would suggest the invention, as stated in the decision of In Re Lintner (172 USPQ 560, 562, CCPA 1972):

"In determining the propriety of the Patent Office case for obviousness in the first instance, necessary to ascertain whether or not reference teachings would appear to be sufficient one of ordinary skill in the relevant art before him having the references to the proposed substitution, combination other modification."

Similarly, In Re Regel (188 USPQ 136 CCPA 1975) decided that the question raised under Sec. 103 is whether the prior art taken as a whole would suggest the claimed invention to one of ordinary skill in the art. Accordingly, even if all the elements of a claim are disclosed in various prior art references, the claimed invention taken as a whole cannot be said to be obvious without some reason given in the prior art why one of ordinary skill would have been prompted to combine the teachings of the references to arrive at the claimed invention.

Simply put, and as stated in In re Clinton (188 USPQ 365 CCPA 1976), "do the references themselves ... suggest doing what appellants have done", such that there is a requirement that the prior art must have made

any proposed modification or changes in the prior art obvious to do, rather than obvious to try.

It is respectfully put forward by Applicant that there is not any substantial reason to view the Steidle reference as making the invention obvious, since it does not suggest reversible directions of driving and driven motions, as provided by the invention. To say that this feature is obvious to try, or a design choice, as the Examiner seems to do, is one thing, but to recognize the above-outlined design advantages is another thing.

Therefore, independent claim 1 is deemed to be patentable over the prior art, and the dependent claims are likewise deemed patentable being based thereon.

In view of the foregoing amendments and remarks, all of the claims remaining in the application are deemed to be allowable. Further reconsideration and allowance of the application is respectfully requested at an early date.

Respectfully submitted,

Edward Langer Attorney

Reg. No. 30,564





UNITED STATES DEPARTMENT OF COMMERC

Patent and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231

APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. 08/894,211 07/30/97 HAMMER 2036.018PCT **EXAMINER** LEVISOHN LERNER BERGER & LANGSAM PM82/0119 757 THIRD AVENUE KNIGHT NEW YORK NY 10017 ART UNIT PAPER NUMBER 3626 DATE MAILED: 01/19/01

Please find below and/or attached an Office communication concerning this application or

Commissioner of Patents and Trademarks

RECEIVED JAN 2 5 2001

PTO-90C (Rev. 2/95) U.S. GPO: 2000-473-000/44602

2 - Mail Copy

•		Application No.	Applicant(s)				
	Office A. d.	08/894,211					
Office Action Summary		Examiner	HAMMER, MORDECHAI				
		Anthony to the	Art Unit				
	The MAILING DATE of this communication appearage. Period for Reply	Anthony Knight	3626				
	A SHORTENED STATUTODY DECISION	on the cover sheet with the co.	rrespondence address				
	A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any Status						
	1) Responsive to communication(s) filed on <u>21 De</u>						
	3) Since this application is in condition	action is non-final.					
	3) Since this application is in condition for allowand closed in accordance with the practice under Expensition of Claims	ce except for formal matters, pros c parte Quayle, 1935 C.D. 11, 45	secution as to the merits	is			
	reposition of Cialitis	-10.71, 40.	0 O.G. 213.				
	4) \boxtimes Claim(s) <u>1-49</u> is/are pending in the application.						
	4a) Of the above claim(s) is/are withdrawn	from consideration					
	Is/are allowed.			1			
	6)⊠ Claim(s) <u>1-49</u> is/are rejected.						
	7) Claim(s) is/are objected to.						
	8) Claims are subject to restriction and/or election requirement.						
	Application Papers						
	9) The specification is objected to by the Examiner.						
J	10) Ine drawing(s) filed on is/are objected to but the						
	11)☐ The proposed drawing correction filed on is 12)☐ The oath or declaration is objected to by the □	: a)∏ approved b)∏ disapprov	ed.				
	water to objected to by the Exam	iner.					
	ority under 35 U.S.C. § 119						
	13) Acknowledgment is made of a claim for foreign price a) All b) Some ★ c) None of	ority under 35 U.S.C. § 119(a)-(d)					
	Notice of:						
	1. Certified copies of the priority documents have been received.						
	The property documents have	e been received in Application N	0.				
	3. Copies of the certified copies of the priority documents have been received in Application No application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.						
1.	4) Acknowledgement is made of a claim for domestic p	priority under 25 L2 0 0 0					
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Attac	hment(s)						
15)	Notice of References Cited (PTO-892)						
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.S. Pater	t and Trademark Office.	19) Notice of Informal Patent 20) Other:	Application (PTO-152)				
10-32	6 (Rev. 9-00) Office Action Su	mmary	D 1 1	/الـــ			

This office action is in response to the amendment filed December 21, 2000 and the personnel interview held November 21, 2000. Applicant's representative stated in the interview that the final rejection mailed July 21, 2000 was premature. The finality of the previous office action is withdrawn. I new action on the merits appears below.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The following is a quotation of 37 CFR 1.71(a)-(c):

- (a) The specification must include a written description of the invention or discovery and of the manner and process of making and using the same, and is required to be in such full, clear, concise, and exact terms as to enable any person skilled in the art or science to which the invention or discovery appertains, or with which it is most nearly connected, to make and use the same.
- (b) The specification must set forth the precise invention for which a patent is solicited, in such manner as to distinguish it from other inventions and from what is old. It must describe completely a specific embodiment of the process, machine, manufacture, composition of matter or improvement invented, and must explain the mode of operation or principle whenever applicable. The best mode contemplated by the inventor of carrying out his
- (c) In the case of an improvement, the specification must particularly point out the part or parts of the process, machine, manufacture, or composition of matter to which the improvement relates, and the description should be confined to the specific improvement and to such parts as necessarily cooperate with it or as may be necessary to a complete understanding or description of it.

The specification is objected to under 37 CFR 1.71 because the phrase "hand-holdable" is not described in the specification. Applicant has not provided any basis for the interpretation of this phrase in the specification.

Claims 1-49 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s),

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at the time the application was filed, had possession of the claimed invention.

The specification does not set forth a description of the phrase "hand-holdable".

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-49 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is unclear from the claims how the phrase "hand-holdable" should be interpreted. Given applicant's disclosure of a myriad of objects from vacuum cleaner wands to sail boat masts. It is not clear whether "hand-holdable" should be interpreted as any object that can be held with outstretched hands, such as, the large sail boat mast or is the phrase limiting the claims to those inventions that fit within the palm of a single hand?

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which invention was made.

Claim1-3, 5, 8, 16-18, 36, 38, 41, 42, 45, and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pipes, U.S. Patent No. 4,388,033 in view of Wilding, U.S. Patent No. 5,040,941. Pipes discloses a motion transmission and multiplication system (10) comprising: at least first 12 and second 14 elements extending in the same orientation; and at least a first means

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62 linking said first 12 and second 14 elements and being movable with respect to at least one of them, said first linking means 62 being arranged on said first element 12 such that when said first linking means 62 is provided with a driving motion (by pinion 22) in a direction of said orientation, said first 12 and second 14 elements are provided with a driven motion with respect to each other. First element 12 telescopically receives second element 14 and first linking means 62 is a flexible member. The speed control is the motor. Third element 16 is telescopically received in the second element 14. Linking means 62 is enclosed in the first element 12. Rollers (35, 43, 51, 57) guide the elements in tracks (36, 44, 52, 58). System 10 is a conveyor. The room that the system is used in can be illuminated. A toy is anything that can be used for amusement. Any object can be a toy since it depends upon the intent of the person using the device. The movement of the conveyer is not dependent upon gravity. Pipes does not disclose that the motion is controllably reversible. Wilding teaches the use of a controller 25 for the purpose of controlling the movement of a conveyer 30 for the purpose maintaining consistent movement of the product being conveyed. It would have been obvious to a person having ordinary skill in the art at the time of applicant's invention to modify the device of Pipes as taught by Wilding for the purpose of maintaining consistent movement of the product being conveyed. Claims 1-3, 5, 8-12, 16-19, 23, and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over White, U.S. Patent No, 1,456,478 in view of Wilding. White discloses a motion transmission and multiplication system

comprising: at least first 20 and second 23 elements extending in the same

orientation; and at least a first flexible means 43 linking said first 20 and second 23 elements and being movable with respect to at least one of them, said first flexible linking means 43 being arranged on said first element 20 such that when said first flexible linking means 43 is provided with a driving motion (by gearwheels 46, 48) in a direction of said orientation, said first 20 and second 23 elements are provided with a driven motion with respect to each other. First 20 and second 23 elements are rigid and telescope in side-by-side tracks. The first, second and third elements are rigid and driven by screw 16. First 20, second 23, and third 24 elements are shutters. White does not disclose the use of a controller. Wilding teaches the use of a controller 25 for the purpose of controlling the movement of a linear device (conveyer 30) for the purpose maintaining consistent movement of the product being conveyed. It would have been obvious to a person having ordinary skill in the art at the time of applicant's invention to modify the device of White as taught by Wilding for the purpose of maintaining consistent movement of the device.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over White in view of Wilding as applied to claims 1-3, 5, 8-12, 16-19, 23, and 40 above, and further in view of Sandberg, U.S. Patent No. 326,336. White in view of Whiting, as set forth above, discloses all of the claimed invention except that the driving motion is provided by hand. Sandberg teaches the use of a hand crank G for the purpose of allowing hand operation of an extendible member. It would have been obvious to a person having ordinary skill in the art at the time of applicant's invention to modify the device of White in view of Wilding and further

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in view of Sandberg to incorporate a hand crank for the purpose of allowing hand operation of the device.

Claims 6, 7, 13-15, 19-22, 25-35, 37, 39, 43, 44, 46, 48, and 49 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

The reference of Curtis is cited to show a controller.

RESPONSE TO APPLICANT'S ARGUMENTS

Applicant's argument that the Steidle reference is gravity dependent for the reverse motion of the telescopic member is persuasive and the rejections based upon this reference are withdrawn. However, applicant insist on arguing for claims of a scope that are not patentable. The claims are considered to be an obvious variant of Pipes. As stated in the office action mailed July 21, 2000, the reference of Pipes did not explicit disclose a reversibly controllable device it was not conceded that the reference of Pipes couldn't be modified to include a controller.

Applicant argues in the amendment filed April 30, 1999 that Pipes does not disclose telescopic members that are nested. This limitation is not set forth in claim 1 and in fact claim 38, which depends from claim 1, sets forth that the first and second elements are moveable side-by-side. Claim 1 is silent as to the exact position of the members relative to each other.

Pipes discloses members that move with the linking means. It is the movement of Pipes linking means that causes the movement of the elements.

Applicant's argument concerning the practical applications being different is not understood. Applicant has argued that his invention can be used in almost any situation where an extensible device is need. Accordingly, any device that is extensible is considered to be applicant's field of endeavor.

Pipes does not disclose the use of a controller to control the movement of the conveyer. Wilding discloses the use of a controller to control the movement of a conveyer for the purpose of maintaining a consistent discharge of products from the conveyer. As set forth above, one having ordinary skill in the art would thus find the invention obvious.

Applicant argues that White does not disclose the nesting of the telescopic elements. This argument is not understood. As clearly shown in the figures, the elements are nested one inside of the other. Furthermore, this is not a limitation contained in claim 1 and is not set forth until a later dependent claim. Applicant's argument that the linking means is not contained within the elements is not understood. As clearly shown in Figures 1 and 2, the linking means 43 is within the telescopic elements 20, 23, 24, and 25. White does not disclose a controller. Wilding is relied upon for the teaching of a controller for a linear member. The fact that a hand crank can be used instead of a motor is not considered to be a patentable difference.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is

filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Knight whose telephone number is (703) 308-3179. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3597 for regular communications and (703) 305-3598 for After Final communications.

AK January 12, 2001 Anthony Kright Suponvisory Patent Examiner

1	Notice of References Cited			Application/Control No. Applicant(s)			/Patont Under		
				08/894,211		Applicant(s)/Patent Under Reexamination HAMMER, MORDECHAI			
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-		Τ		U.S. P/	ATENT DOCUMENTS		3020		
*		DOCUMENT NO.	DATE		NAME	CLASS	SUBCLASS	SOUR	
	I A	5,040,941	Aug. 1991	Wilding				APS	OTHER
	В	4,865,860	Sep. 1989	Curtis					
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A copy of this reference is not being furnished with this Office action. (See Manual of Patent Examining Procedure, Section 707.05(a).)

"APS encompasses any electronic search i.e. text, image, and Commercial Databases.

U.S. Patent and Trademark Office

PTO-892 (Rev. 03-98)

Notice of References Cited



Receipt for application papers is evidenced hereon by the Official stamp of the U.S. Patent & Trademark Office:

Hand Carried to USPTO on JULY 18, 2001:

Applicant:

HAMMER, MORDECHAI

Title:

EXTENDIBLE AND RETRACTABLE ELEMENTS AND VARIOUS USES FOR THE ELEMENTS

Docket:

0878

Included with this hand carry are a Transmittal Letter (1 page), an Amendment in response to a Final Office Action mailed 19 January 2001 (15 pages), a Notice of Appeal (1 page signed), a Copy of the Notice of Appeal (1 page), a Petition for Extension (3 months) (1 page, signed), and a Credit Card Form in the amount of \$600.00.

No. 320

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: HAMMER, Mordechai

Serial No.

: 08/894,211

Filed

July 30, 1997

For

EXTENSIBLE AND RETRACTABLE

ELEMENTS AND VARIOUS USES FOR THE

Group Art Unit 3626 Examiner: A. Knight

Raanana, Israel July 16, 2001

Hon. Commissioner of Patents and Trademarks Washington, D.C. 20231

Sir:

RESPONSE TO FINAL REJECTION UNDER 37 CFR 1.116 EXPEDITED PROCEDURE

response to the Final Office Action mailed January 19, 2001, kindly amend the above-identified application as follows:

In the specification:

On page 8 line 11, kindly rewrite the paragraph as follows:

Referring to Fig. 1, there is shown a preferred embodiment of a tool 100 which can be operated from either side. In Fig. 1 there is seen a pipe 102 with two hand-movable segments 104, 106 (or more) on which there can be assembled different tools at either end as needed. In the figure, a roller 101 for painting is assembled on

the top end 110. The roller and pipe are operated by holding the fixed handle 114 in one hand, and operating the activation handle 116 (that moves on and along segment 104) with the other hand, in reference to the fixed handle 114. This moves segment 106 up and down through motion of straps 118 which are attached at either end to handle 116 at points 119 with the loop sliding through holes 120 formed in segment 104, and being attached to end 122 of segment 106, such that roller 101 turns and moves up and down, to perform the paint job.

In the claims:

Kindly amend claim 1 as follows:

1. (Thrice amended) A motion transmission and multiplication system comprising:

least first and second hand-movable elements each having anterior and posterior ends, said elements extending in the same orientation, each element having at least one point thereon connectable to a tool or other object; and

at least a first means linking said first and second elements and being movable with respect to at least one of them, said first linking means also being connectable to an additional element;

said first linking means being arranged on said elements such that when said first linking means is moved with a controllably reversible driving motion with respect to either of said anterior and posterior ends of a selected reference one of either of said first and second elements, wherein said driving motion is in a direction in-line with said orientation,

then said first and second elements, and if connected, said additional element are simultaneously provided with a controllably reversible and multipliable, non-gravity dependent, linear-to-linear

driven motion with respect to each other in-line with said orientation,

said driven motion being in the same direction as said driving motion, or reverse thereto, in accordance with which reference one of said first and second elements was selected in respect of said driving motion.

Kindly delete claim 4 without prejudice.

REMARKS

Applicant has carefully considered the Office Action of January 19, 2001 rejecting all of the claims. The Applicant wishes to express his appreciation to the Examiner for the indication of allowable subject matter.

The present response is intended to be fully responsive to all points of rejection raised by the Examiner and is believed to place the application in condition for allowance. Favorable reconsideration and allowance of the application are respectfully requested.

It is noted with appreciation that the Examiner has removed the finality of the previous Office Action, as per the discussion with the undersigned during the interview of Nov. 21, 2000. However, Applicant already submitted to former Examiner Ackerman, via the had response filed April 28, 1999, remarks to some of the same prior art cited again in the latest Office Action, e.g., Pipes, White, Sandberg. Therefore, it appears that the prosecution of the current application has been unduly burdened by the change in Examiners, which necessitated re-establishment of previously-established positions.

As already stated, the present application is the National Stage of PCT patent application PCT/US96/01209.

It is requested that the requirement for formal drawing corrections be held in abeyance until an indication of allowance has been received.

Claim 1 has been amended to include the recitation of claim 4, which has been deleted. Thus, claims 1-3 and 5-49 remain in the case.

RESPONSE TO EXAMINER'S FORMAL OBJECTIONS / REJECTIONS

The specification has been amended to overcome the Examiner's objection under 37 CFR 1.71 and 35 USC 112, by the addition of the term "hand-movable" at page 8, line 14. This amendment replaces the previously suggested terminology, "hand-holdable" and it is believed that

"hand-movable" is more precise and clearly understood, since it means that the elements \underline{may} be moved by hand.

The term "hand-movable" is <u>not</u> meant to limit the invention to physical contact with the hand, since as shown in Fig. 16, and described at p. 15, lines 1-13, a vacuum cleaner tool construction may have a motor 194 which is activated by pressing switch 196. Thus, the elements are "hand-movable" by virtue of the motorized movement, under hand control (also Figs. 46-47 and p. 40).

This amendment overcomes the objection under Sec. 112 and is designed particularly point out the subject matter which Applicant regards as the invention.

The Examiner's has objected to claims 1-49 under Sec. 112, regarding Applicant's possession of the invention at the time of filing. As will be clear from a careful reading of the specification, Applicant was in possession of the subject matter of the claimed invention at the time of filing the application, especially in relation to the hand-movable aspect.

For example, at page 8, line 16 it is stated that "the roller and pipe are operated by holding the fixed handle 114 in one hand, and operating the activation handle 116......with the other hand." The specification has also been amended at page 8, line 19, to indicate that the hand motion is in reference to the other hand.

The illustration of this activity is clear from Figs. 5 and 6 where a man is shown operating the segments of telescopic tool 100, and this shows that the device is hand-movable, one hand moving in reference to the other.

Additional illustrations of this activity include Fig. 26 where a shoulder-belt mounted pipe is arranged for fruit picking, and as stated at page 21 line 18 "it is possible to use one hand that will move the activating handle..." Similarly, regarding the sail boat mast at page 51 line 18, it is stated, "a lifting arm 918 is connected to the top of the second segment 906 for the user to reach it by handle 920", so that it is clear that the

sailboat mast segment is operable by hand motion, therefore, it is hand-movable.

Furthermore, the recitation of "hand-motion" in claim 4 clearly means "hand-movable", and this has now been incorporated in claim 1, and claim 4 deleted.

Therefore, there can be no question as to whether the telescopic tool is hand-movable, and this new terminology should be acceptable and should not be considered new matter, since it is clearly based on the initial specification, claims and drawings.

As stated in the previously filed Remarks, the object of the present invention is to overcome the problems of existing products exhibiting telescopic movement. The invention provides a system of telescopic elements for multiplying the effective physical work achieved by the telescopic motion of various structures, with many applications including cleaning systems, vacuum cleaners, measuring rods, tools, paint rollers, wall scrapers, music stands and instruments, parasols, shades, curtains, sailing boat masts, and structures such as chairs, tripods, tables, tents, etc.

By way of a quick review, the previous amendments to claim 1 have already incorporated the following features:

- simultaneous driving and driven motion of linking means and first and second elements;
- driving motion of the linking means is controllably reversible;
- 3) driven motion of said first and second elements is non-gravity dependent;
- 4) both extension and retraction motion of the elements are under full, reversible and multipliable control of the mechanism;
- 5) motion of the elements is in-line with their orientation, achieving linear-to-linear driven motion; and
- 6) the elements are connectable to a tool or other object.

As now amended, independent claim 1 incorporates another feature previously recited in claim 4. This feature defines the relationship between the directions of driving and driven motion, such that when driving motion is applied between an end of a selected reference one of the first and second elements, and the linking means (loop), there results one of two types of extension and retraction motion, with driven motion developed either in the same, or reverse direction.

As mentioned in the previously filed Remarks, examples of this motion are described in the text, with reference to Figs. 1-6.

The advantage of this operation is described in the text at page 8, last paragraph, through page 9, line 12, with reference to Figs. 1-6. In one case, in a two-element construction of Fig. 1, where the operating hand moves the handle 116 opposite the motion of segment 106, the user reaches greater distances, "which is good for working at heights..."

In another case, where the operating hand moves handle 126 in the <u>same</u> direction as the segment 104, this arrangement is "effective for working in lower places". Thus, it can be seen that the inventive tool solves a particular problem at high and low locations, and it is solved by this unique motion.

The Examiner is respectfully requested to carefully review the pair of Figs. 2-3 (showing oppositely-directed hand motion) and Figs. 5-6 (showing same direction hand motion), each of which shows operation of the system from a different end in a three-element construction.

Thus, as per amended claim 1, the ability to select the direction of the driven motion, via application of driving motion with respect to an end of a selected reference one of the segments during extension or retraction, gives the present invention unique advantages over the prior art.

The importance of this feature is that it <u>defines</u> the directions of the driving motion and the driven motion, depending on which of the first or second element is selected as the reference <u>end</u> with respect to which the driving motion is applied to the linking means.

If the driving motion is applied to the linking means with respect to the first element, it is clear that the first element is held fixed in place. Alternatively, if the driving motion is applied with respect to the second element, it is clear that the second element is held fixed in place. This choice is then the basis for the direction of the resulting driven motion, and it serves to highlight the versatility of the inventive device, as it can be operated from either end of the first and second elements.

Thus, in the case of two nested elements, the end of the narrow, inner element or the larger, outer element can be held, and the device operated such that the other element is provided with driven motion. The tool or other object then benefits from the motion imparted to the element provided with driven motion, in the direction selected.

RESPONSE TO EXAMINER'S PRIOR ART REJECTIONS

The Examiner has rejected claims 1-3, 5, 8, 16-18, 36, 38 41-42, 45 and 47 under Sec. 103(a) as being unpatentable over Pipes in view of Wilding.

Pipes discloses a shuttle assembly of elements placed alongside one another with chains (66) mounted on sprocket wheels (48, 49, etc.). Pipes does not lend itself to driving motion provided by hand, and as the Examiner concedes, Pipes does not disclose controllably reversible motion.

Wilding discloses an automatic storage system, <u>not</u> a telescopic system, having conveyor apparatus for handling particulate products such as peanuts or cereal. An electronic controller 25 is applied to control the conveyor movements using electronic sensors such as a

photocell, see col. 5, lines 29-32, and col. 6, lines 53-57.

The application of an electronic controller to automated control systems as in Wilding can hardly be compared with the simple, controllably reversible motion provided by the system of the present invention. This is because as now recited in amended claim 1, the inventive system is hand-movable, meaning it can be moved by hand, while heavy, automated systems are typically not designed for manual operation. Therefore, an automated system such as Wilding does not provide a relevant teaching in this case and is not a basis for comparison, being electronic.

It would therefore be unreasonable to consider the combination of Pipes and Wilding as rendering the claims obvious, since a skilled person would not be prompted to combine them nor consider this combination to be obvious.

The Examiner has rejected claims 1-3, 5, 8-12, 16-19, 23 and 40 under Sec. 103(a) as being unpatentable over White in view of Wilding.

White discloses a collapsible structure which employs an arrangement of sprocket wheels and chains to allow telescopic movement of a sectioned structure. As can be seen by a careful reading of White, the telescopic elements (20, 23, 24 and 25) are on the upper portion of the structure, while the mechanism providing movement, including the chain 43, is below and separate from this. This is unlike the invention, where the linking means is "arranged on the said (first and second) elements".

In addition, the requirement in White for wheels carrying the chains is <u>not</u> a requirement of the present invention. For example, Figs. 7-9 of the specification of the present invention show a linking means without chains comprising a single, double-toothed sprocket wheel, which converts the driving motion to a driven motion. Even 78 years after White was published, the practical applications do not exist and are also very different from those of the present invention.

The Examiner concedes that White does <u>not</u> disclose the use of a controller. Wilding, as stated above, is not applicable here for controlling the movement, since Wilding teaches an electronic controller for automated control systems, rather than the simple, controllably reversible motion provided by the system of the present invention. An automated system such as Wilding does not provide a relevant teaching in this case and is not a basis for comparison, since it is an electronic device.

It would therefore be unreasonable to consider the combination of White and Wilding as rendering the claims obvious, since a skilled person would not be prompted to combine them nor consider this combination to be obvious.

The Sandberg reference, for its teaching of a hand crank, is not a basis for rejection since it adds nothing to the overall system of telescopic motion as presented by the invention. Sandberg teaches a fire escape within which only the extension motion which raises the ladder controlled, while the retraction motion controlled and is provided by gravity. A hand crank in a gravity-dependent system does not teach controllably reversible motion, nor does it teach how this could be achieved in combination with other components. Applicant respectfully requests that the Examiner carefully reconsider the scope of the invention, as now claimed, with respect to the limited teaching of Sandberg.

In summary, the present invention provides a tool attached to a telescopic system not requiring a support base, with the system enabling, from either end of the system, hand-movable, controllably reversible driving motion in-line with the orientation of the elements, and controllably reversible, non-gravity dependent, linear-to-linear driven motion. Such a system is deemed not to have been obvious since the teachings of Pipes, White, Wilding and Sandberg do not disclose this, or even suggest such a combination, nor do they disclose attached tool or object for performing useful work.

The motion of the linking means in the invention is adjustably multipliable, with the linking means adjustably arranged on the elements, as can be seen in Figs. 10-15b, 22, 24, and 30, etc.

As mentioned previously, the ability to reverse the driving and driven motions gives the present invention the advantage of having a design which solves the problems of reaching both high and low areas. Since these particular problems were not solved by the prior art, the invention cannot be deemed to be obvious.

EXAMINER'S STATEMENT IN RESPONSE TO APPLICANT'S ARGUMENTS

Applicant acknowledges the Examiner's removal of the Steidle reference, as being inappropriate.

The Examiner states that the Applicant insists on arguing for claims of a scope that is not patentable. However, it is respectfully maintained by the Applicant that the patentability of the pending claims is a matter to be decided by the Patent Office, and ultimately, the courts, but clearly, the intent is to achieve the broadest claims possible, as allowed by law.

Since the concept of the invention has many and varied applications, some of which may be developed in the future, Applicant wishes to have the broadest claim possible to allow for claim coverage wherever applicable.

As stated previously, the Examiner's concedes that Pipes does not disclose controllably reversible motion, but it is contended that is possible to modify Pipes to include a controller. As stated above, Applicant maintains that this combination is not realistic as Wilding is designed for automated control systems.

The issue of whether Pipes is nested becomes secondary since it cannot be a basis for rejection for other reasons, which are contained in the limitations of claim 1 as outlined above, and re-iterated here: Pipes does not disclose a system enabling, from either end of the system, hand-movable, controllably reversible driving

motion in-line with the orientation of the elements, and controllably reversible, non-gravity dependent, linear-to-linear driven motion, with the ability to connect tools or other objects on any element (e.g. 600, Figs. 46-47). The tools or objects which are connectable to any element insure different practical applications from Pipes, which is limited to load handling on only one element, as is seen in Fig. 5 of Pipes, element 20.

The Examiner's statement regarding the issue of nesting in White is secondary, because, as stated previously, the linking means of the invention is "arranged on" the elements, while White has them separated, (chain 43 and elements 20, 23, 24 and 25) as per Fig. 1 of White.

Again, the provision by the present invention of reversible directions of driving and driven motions, based on selection of a reference element for driving motion, is deemed not to have been obvious, since the prior art does not disclose this, nor does it disclose a device like that of the present invention.

In citing the prior art references under Sec. 103(a), the question is raised whether the references themselves would suggest the invention, as stated in the decision of In Re Lintner (172 USPQ 560, 562, CCPA 1972):

"In determining the propriety of the Patent Office case for obviousness in the first instance, it is necessary to ascertain whether or not the reference teachings would appear to be sufficient for one of ordinary skill in the relevant art having the references before him to make the proposed substitution, combination or other modification."

Similarly, In Re Regel (188 USPQ 136 CCPA 1975) decided that the question raised under Sec. 103 is whether the prior art taken as a whole would suggest the claimed invention to one of ordinary skill in the art. Accordingly, even if all the elements of a claim are disclosed in various prior art references, the claimed

invention taken as a whole cannot be said to be obvious without some reason given in the prior art why one of ordinary skill would have been prompted to combine the teachings of the references to arrive at the claimed invention.

Simply put, and as stated in In re Clinton (188 USPQ 365 CCPA 1976), "do the references themselves ... suggest doing what appellants have done", such that there is a requirement that the prior art must have made any proposed modification or changes in the prior art obvious to do, rather than obvious to try.

It is respectfully put forward by Applicant that there is not any substantial reason to view the cited references as making the invention obvious, since none of them, individually or in combination, suggests reversible directions of driving and driven motions, as provided by the invention. To say that this feature is obvious to try, or a design choice, as the Examiner seems to do, is one thing, but to recognize the above-outlined design advantages is another thing.

Therefore, independent claim 1 is deemed to be patentable over the prior art, and the dependent claims are likewise deemed patentable being based thereon.

In view of the foregoing amendments and remarks, all of the claims remaining in the application are deemed to be allowable. Further reconsideration and allowance of the application is respectfully requested at an early date.

Respectfully submitted,

Edward Langer, Attorney

Reg. No. 30,564

VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the specification:

On page 8 line 11, the paragraph has been amended as follows:

Referring to Fig. 1, there is shown a preferred embodiment of a tool 100 which can be operated from either side. In Fig. 1 there is seen a pipe 102 with two hand-movable segments 104, 106 (or more) on which there can be assembled different tools at either end as needed. In the figure, a roller 101 for painting is assembled on the top end 110. The roller and pipe are operated by holding the fixed handle 114 in one hand, and operating the activation handle 116 (that moves on and along segment 104) with the other hand, in reference to the This moves segment 106 up and down fixed handle 114. through motion of straps 118 which are attached at either end to handle 116 at points 119 with the loop sliding through holes 120 formed in segment 104, and being attached to end 122 of segment 106, such that roller 101 turns and moves up and down, to perform the paint job.

In the claims:

Claim 1 has been amended as follows:

1. (Thrice amended) A motion transmission and multiplication system comprising:

at least first and second [hand-holdable]

hand-movable elements each having anterior and posterior

ends, said elements extending in the same orientation,

each element having at least one point thereon

connectable to a tool or other object; and

at least a first means linking said first and second elements and being movable with respect to at least one of them, said first linking means also being connectable to an additional element;

said first linking means being arranged on said elements such that when said first linking means is [provided] moved with a controllably reversible driving motion with respect to either of said anterior and posterior ends of a selected reference one of either of said first and second elements, wherein said driving motion is in a direction [in line] in-line with said orientation,

then said first and second elements, and if connected, said additional element are simultaneously provided with a controllably reversible and multipliable, non-gravity dependent, linear-to-linear driven motion with respect to each other [in line] in-line with said orientation,

said driven motion being in the same direction as said driving motion, or reverse thereto, in accordance with which reference one of said first and second elements was selected in respect of said driving motion.



UNITED STATES DEPARTMENT OF COMMERC **Patent and Trademark Office**

Address: COMMISSIONER OF PATENTS AND TRADEMARKS

3626 DATE MAILED:

Washington, D.C. 20231

APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. 08/894,211 07/30/97 HAMMER 2036,018PCT EXAMINER PM82/0801. LEVISOHN LERNER BERGER & LANGSAM KNIGHT **ART UNIT** PAPER NŮMBER 757 THIRD AVENUE NEW YORK NY 10017

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

08/01/01

•	Post-it® Fax Note 7671	Date 8/17/0/ # of 3	
Te Approved Privacy Statement	LESCIVED TERMS OF USE O	From Andrew Langson Still in Lucifie Loudon yosonim Topo @	TIC
	Phone #	Phone # 486-7272	MUS
	FXX 817-6208	Fac 486-0513	

printing, copying, forwarding or saving them, and notify the sender immediately; forwarding or saving them. Please delete the message and attachments without you are not the intended recipient, you are prohibited from printing, copying, information that is confidential and protected by privilege from disclosure. If This message and its attachments are sent by a lawyer and may contain

7 JO 1702 508 (How. 2015) V.S. GPO: 2000-473-000/44602 Received: 8/17/01 11:33AM; 212 486 0323 -> Alleen and Andrea; Page 2 LEVISOHN LERNER Fax:212-486-0323 Aug 17 '01 11:28 P.0

Aug 17 '01 11:28 P.02

Applicant(s)

_		Application No.	Applicant(s)				
Advisory Action		08/894,211	HAMMER, MORDECHAI				
		Examiner	Art Unit				
		Anthony Knight	3626				
	-The MAILING DATE of this communication appears on the cover sheet with the correspondence address -						
	THE REPLY FILED 17 July 2001 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either. (1) a timely filed amendment which places the application in condition for allowance, (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.						
	PERIOD FOR REPLY [check either a) or b)]						
	a) The period for reply expires 6 months from the mailing date of	f the final rejection.					
	b) The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).						
)	Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filled is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under .37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
	1.☑ A Notice of Appeal was filed on 17 July 2001. App 37 CFR 1.192(a), or any extension thereof (37 CF	ellant's Brief must be filed withing R 1.191(d)), to avoid dismissal	n the period set forth in of the appeal.				
	2. The proposed amendment(s) will not be entered b	ecause:	·				
	(a) ☑ they raise new issues that would require further consideration and/or search (see NOTE below);						
	(b) they raise the issue of new matter (see Note below);						
	(c)						
	(d) they present additional claims without canceling a corresponding number of finally rejected claims.						
	NOTE: See Continuation Sheet.						
	3.⊠ Applicant's reply has overcome the following rejec	tion(s): <u>35 USC 112, 1st peragrap</u>	<u>ħ</u> .				
	Newly proposed or amended claim(s) would canceling the non-allowable claim(s).	be allowable if submitted in a s	reparate, timely filed amendment				
)	5.☐ The a)☐ affidavit, b)☐ exhibit, or c)☐ request fo application in condition for allowance because:		sidered but does NOT place the				
	6. The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.						
	7. For purposes of Appeal, the proposed amendment(s) a) will not be entered or b) will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.						
	The status of the claim(s) is (or will be) as follows:	v .					
	Claim(s) allowed:						
	Claim(s) objected to:						
	Claim(s) rejected: <u>1-49</u> .						
	Claim(s) withdrawn from consideration:						
	8. The proposed drawing correction filed on is	a) approved or b) disapp	proved by the Examiner.				
	9. Note the attached Information Disclosure Statemen	رر(s)(PTO-1449) Paper No(s					
	10. Other:	· · · · · · · · · · · · · · · · · · ·	franki-le				
	Anthony Knight						
			Patent Examiner				
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TRIDURENS Shoot (PTO-303)

Application No.

08/894,211

Continuation of 2. NOTE: The first linking means being connectable to an additional element was not claimed previously, nor was a search conducted for an additional element.



UNITED STATES DEPARTMENT OF COMMERCE Patent and Trademark Office

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APPLICATION NUMBER FILING DATE FIRST NAMED APPLICANT 08/894,211 30/97 2036.018 PCT Hordechai Hammer

> EXAMINER A. Knight ART UNIT PAPER NUMBER

DATE MAILED: INTERVIEW SUMMARY
All participants (applicant, applicant's representative, PTO personnel):
(1) Ed Langer Atty (3)
Tony Kright PTO (4)
Date of Interview Hug 22, 2001
Type: Telephonic Televideo Conference Personal (copy is given to applicant Tapplicant's representative). Exhibit shown or demonstration conducted: Yes No If yes, brief description: Video tape of invertor
demonstrative broom handle maghandle and ye cum cleaner wand and 3
models of And invention having linking means visable in interior of handles. Agreement Dwas reached. Dwas not reached.
Claim(s) discussed: <u>Claims</u> of record
Identification of prior art discussed: Prior art of record
Description of the general nature of what was agreed to if an agreement was reached, or any other comments: Applicant's
representative has agreed to amond the premble of claim 1 to
include the specific peritations for the use of the device as
recited in the allowed (objected to claims), Such claims, will
be considered as combination claims.
(A fuller description, if necessary, and a copy of the amendments, if available, which the examiner agreed would render the claims allowable must be attached. Also, where no copy of the amendments which would render the claims allowable is available, a summary thereof must be attached.)
☐ It is not necessary for applicant to provide a separate record of the substance of the interview.
Unless the paragraph above has been checked to indicate to the contrary. A FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION IS NOT WAIVED AND MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has are ready been filed, APPLICANT IS GIVEN ONE MONTH FROM THIS INTERVIEW DATE TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW.
Examiner Note: You must sign this form unless it is an attachment to another form.
Anthony Kright

FORM PTOL-413 (REV. 2-98)

Supervisory Patent Exercises
Group 3600

EDWARD LANGER, B.S.E.E., M.B.A., J.D.



ADVOCATE & PATENT ATTORNEY

312 GIRON CENTER, P.O.B. 410 RAANANA 43103 ISRAEL TEL: 972-9-7713585 FAX: 972-9-7713593 E-MAIL: edlanger@netvision.net.il

Mr. Anthony Knight, Supervisory Patent Examiner US Patent Office, Washington, D.C. 20231

October 14, 2001 BY FAX (703) 305-7687

URGENT

Re: US Pat. Appln. S/N 08/894,211 (PCT National Stage, filed July 30, 1997) "EXTENDIBLE AND RETRACTABLE ELEMENTS AND VARIOUS USES FOR THE ELEMENTS"

Our File: 0878 Dear Mr. Knight,

I would like to summarize the discussions we have had recently by telephone after our August 22, 2001 meeting. Although at the end of the meeting it had been agreed that a modified preamble would enable claim 1 to be allowable, there remains a misunderstanding of the type of language needed for this. I had hoped to meet with you again on this matter on Oct. 16/17 but you indicated in our phone discussion of October 10, 2001 that this would not be useful.

The Examiner expressed the following points in our phone discussion of October 10, 2001:

- 1. The "field-of-use" limitations acceptable to the Examiner in the preamble are to be written as a closed list, limited to the fields covered in the previously indicated allowable claims, only for these embodiments.
- The Examiner does not feel the invention is patentable outside of these areas.
- 3. Language preserving a broad interpretation of the list of fields, leaving room for others, will <u>not</u> be acceptable.
- The Examiner is concerned that he is unable to search all of fields in which the invention is applicable, and therefore he is unable to properly search the prior art. By way of example, the Examiner indicated that if the invention had a "billion" applications, how would he search them?

The Applicant wishes to summarize his position as follows:

- 1. The Applicant earnestly believes that the invention is applicable to many fields, not a closed list.
- 2. The Examiner has not found any prior art substantially similar to the invention as defined by claim 1.
- 3. As the Examiner can verify, the Applicant has been granted 3 similar US Patents on extendible-retractable devices: 5,322,334, 5,324,086 (currently in reissue proceedings), and 5,881,601 (after successful appeal), none of which were limited by field-of-use restrictions. There is no requirement in the patent law for field-of-use restrictions.
- 4. The searching task of the Examiner appears to have become the focus, not the merits of the invention itself.

It is very unfortunate that the current prosecution has not been completed to date, and the Applicant is therefore delayed in producing his invention in products which include solutions for personal security, which is an important topic, especially today, with applications even in security devices against skyjacking incidents.

The Applicant and the undersigned do not understand the Examiner's position, blocking the path to issuance. Specifically, as was stated earlier at an earlier stage, the initial Final Rejection was premature, and placed the Applicant at a disadvantage, due to problems with the entry of the PCT Sec. 34 amendments. Although the finality of the rejection was later withdrawn, again Applicant is faced with a Final Rejection. The Examiner has conceded that some of the cited prior art is no longer appropriate, and these citations were withdrawn. The Applicant has faced three examinations: a PCT IPER, Ex. Ackerman's comments, and the current exam. There has never been a consistent examination procedure enabling an in-depth analysis of the issues.

For example, the Applicant finds it strange and not realistic that the Examiner rejects, for example, claim 47 to the field of toys by adopting the position that "A toy is anything that can be used for amusement". With this reasoning, anything is a toy, depending on the user's intention. Intent has never been a structural limitation.

The Applicant's position can be stated simply: The invention is widely applicable to many fields, and deals with a motion transmission and multiplication system, for use with devices or systems requiring extension and retraction. The inventive motion transmission system has elements which move simultaneously, with controllably reversible motion, in a hand-movable system, operable from either end of the construction, without a requirement for a base to support the elements. The motion of the linking means is adjustably multipliable, with the linking means adjustably arranged on the elements. No field-of-use restrictions are required for patentability over the prior art.

A proposed claim with markings to show changes is attached to this letter, with a preamble that leaves open the possibility of adapting the invention to many fields. It is hoped that this format is acceptable to the Examiner.

It is respectfully requested that the Applicant's attorney be given a chance to review once again the proposed claim language with the Examiner. Otherwise, the appeal process and a thorough review will be necessary. Thank you for your consideration EMBER OF ISRAEL & PENNSYLVANIA BARSincerely,

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It is proposed to amend Claim 1 as follows:

1. (Four times amended) A motion transmission and multiplication system for use with systems, devices or structures that require movement of segments, to enable extendable and retractable motion, such as cleaning systems, measuring systems, hand-movable tools, music instruments and accessories, electrical and telecommunication devices, transportation and delivery systems, shades, sailing boats, chairs, tripods, tables and tents, said motion transmission and multiplication system comprising:

at least first and second [hand-holdable] elements <u>each</u> ving anterior and posterior ends, said elements extending in the same orientation, each <u>element</u> having at least one point thereon connectable to a tool or other object; and at least a first means linking said first and second elements and being movable with respect to at least one of them, <u>said first linking means also being connectable to an additional element;</u>

said first linking means being arranged on said elements such that when said first linking means is [provided] moved with a controllably reversible driving motion with respect to either of said anterior and posterior ends of a selected reference one of ther of said first and second elements, wherein said driving motion is in a direction [in line] in-line with said orientation,

then said first and second elements, and if connected, said additional element are simultaneously provided with a controllably reversible and multipliable, non-gravity dependent, linear-to-linear driven motion with respect to each other [in line] in-line with said orientation,

said driven motion being in the same direction as said driving motion, or reverse thereto, in accordance with which reference one of said first and second elements was selected in respect of said driving motion.

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ATTORNEY DOCKET NO. FIRST NAMED INVENTOR FILING DATE APPLICATION NO. 1 2035.018PCT 07/30/97 HAMMER 08/894,211 **EXAMINER** PM82/1022 LEVISOHN LERNER BERGER & LANGSAM KNIGHT, A 757 THIRD AVENUE **ART UNIT** PAPER NUMBER - NEW YORK NY 10017 3626

DATE MAILED:

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

10/22/01

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	Application No.	Applicant(s)		
Advisory Action	08/894,211	HAMMER, MORDECHAI		
Advisory Action	Examiner	Art Unit		
	Anthony Knight	3626		
-The MAILING DATE of this communication appe	ars on the cover sheet with the	correspondence address	_	
THE REPLY FILED 12 October 2001 FAILS TO PLACE Therefore, further action by the applicant is required to a final rejection under 37 CFR 1.113 may only be either: (condition for allowance; (2) a timely filed Notice of Appelexamination (RCE) in compliance with 37 CFR 1.114.	void abandonment of this appli 1) a timely filed amendment whi al (with appeal fee); or (3) a tim	cation. A proper reply to ich places the applicatio	n in	
	PLY [check either a) or b)]			
 a) The period for reply expires 6 months from the mailing date of b) The period for reply expires on: (1) the mailing date of this Adverse, will the statutory period for reply expire later the ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS 706.07(f). 	risory Action, or (2) the date set forth in the an SIX MONTHS from the mailing date of FILED WITHIN TWO MONTHS OF TH	f the final rejection, E FINAL REJECTION. See M	PEP	
Extensions of time may be obtained under 37 CFR 1.136(a). The danse been filled is the date for purposes of determining the period of extensive the filled is the date for purposes of determining the period of extensive the control of the shortened by above, if checked. Any reply received by the Office later than three more patent term adjustment. See 37 CFR 1.704(b).	sion and the corresponding amount of the I statutory period for reply originally set in	e fee. The appropriate extensio the final Office action; or (2) as	n fee under s set forth in	
 A Notice of Appeal was filed on <u>18 July 2001</u>. App 37 CFR 1.192(a), or any extension thereof (37 CF 				
2. The proposed amendment(s) will not be entered b	ecause:			
(a) they raise new issues that would require furth	er consideration and/or search	(see NOTE below);		
(b) they raise the issue of new matter (see Note	below);			
(c) they are not deemed to place the application issues for appeal, and/or	in better form for appeal by mat	terially reducing or simp	lifying the	
(d) they present additional claims without cance. NOTE:	ling a corresponding number of	finally rejected claims.		
3. Applicant's reply has overcome the following reject	tion(s):			
4 Newly proposed or amended claim(s) would canceling the non-allowable claim(s).	l be allowable if submitted in a s	separate, timely filed am	endment	
5. The a) affidavit, b) exhibit, or c) request for reconsideration has been considered but does NOT place the application in condition for allowance because:				
The affidavit or exhibit will NOT be considered be raised by the Examiner in the final rejection.	cause it is not directed SOLELY	to issues which were no	ewly	
7. For purposes of Appeal, the proposed amendmen explanation of how the new or amended claims w			an	
The status of the claim(s) is (or will be) as follows:				
Claim(s) allowed:				
Claim(s) objected to:				
Claim(s) rejected: 1-49	·			
Claim(s) withdrawn from consideration:				
8. The proposed drawing correction filed on is	a) approved or b) disap	proved by the Examiner		
9. Note the attached Information Disclosure Stateme	ent(s)(PTO-1449) Paper No(s).			
10. Other:	I de	Left.		
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	Antro	ny Knight Patent Examiner		
, Patent and Trademark Office		p 3600		